RETIEF OF THE RED-TAPE MOUNTAIN by Keith Laumer

worlds of

if Science Fiction

may 1962
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by Fritz Leiber The 64-Square Madhouse

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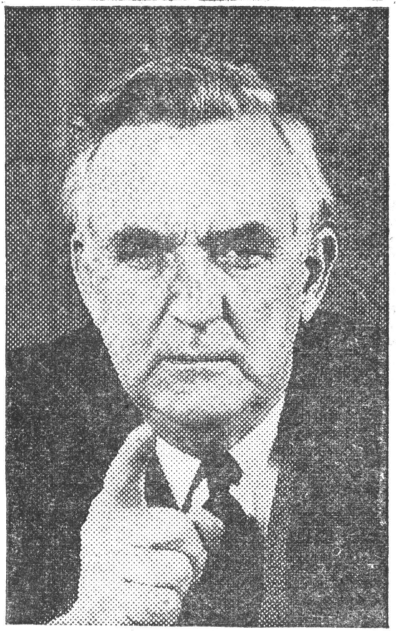

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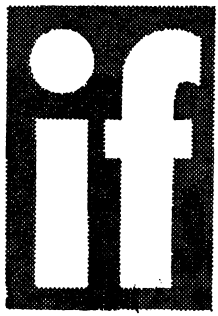
worlds of  science fiction

MAY 1962
All Stories New and Complete

Vol. 12, Number 2

Next issue (July) on sale May 10th

IF published bi-monthly by Digest Productions Corporation, Vol. 12, No. 2 Main Office: 421 Hudson Street, New York 14, New York 35c per copy. Subscriptions 12 issues $3.00 in the United States, Canada, Mexico, South and Central America and U. S. possessions, elsewhere $4.00. Second-class postage paid at New York, New York, and at additional mailing offices. Printed in the U. S. A. by the Guinn Company, Inc., New York 14, N. Y.

JOTS AND TITTLES

WE don't know what a tittle is and (please!) we don't want to know. It just seems to go along pretty well with Jots.

Beating the breeze with our bearded Feature Editor the other day, and he came up with an interesting thought about your letters. He was mulling over the fact—if it is a fact—that there hasn't been a really brilliant new s-f author in a dozen years. He says he doesn't agree with this completely, but somebody said it at a Conference. Back in what Sam Moskowitz calls the Golden Age of S-F—1939-'42, good authors appeared out of nowhere in gross lots: del Rey, Heinlein, Simak, Leinster, Don A. Stuart, Ray Bradbury, Jerome Bixby and plenty more, all in a matter of months. Our bearded F. E. wondered if the letter columns of the day had anything to do with it.

You'd be surprised how many of that bumper crop used to write to the magazines months and years before they sold stories to them. Did the writing of those letters turn them into good authors, or at least toward authorship? Or did they write just because they were writers? Our B.F.E. had no opinion on that; but one thing he did point out was that the letters they wrote were, more often than not, crackling with humor and

loaded with information. There was many a good-natured fist-fight in those columns, and a lot of highly miscellaneous matters got thrashed out.

We wagged our editorial head and told the B.F.E. that some readers nowadays complain that letter columns are just plain dull. And we added that when *Galaxy* put it to a vote, the majority said—no letters. Well, said the B.F.E. scratching his head (with his beard; he has talent, you know) maybe they say that because it's true. And if it's true, all anyone has to do is to write bright, sparkling letters. Then the column won't be dull, people will read it, more will write to it. And maybe, the B.F.E. added thoughtfully, maybe after a few months of sharpening their wits against one another, there'll be a whole explosion of good new writers who can bounce from the letter pages in the back to the bill-of-fare up front.

Just a thought, he said.

WE don't know quite what to do with the thought, so we pass it on to you.

Speaking of the B.F.E., by the way, who says his name (this week anyway) is Theodore Sturgeon, be it known, if you don't know it already, that he is to be the Guest of Honor at the Chicon II, which is the World Science Fiction Convention to be held at the Pick-Congress Hotel in Chicago, next Labor Day weekend. Memberships ($2) and information can be had from George W. Price, Treasurer, P.O. Box 4864, Chicago 80, which is still in Illinois. The B.F.E. is honored, IF is honored, and you ought to try to make it because it's going to be one big beautiful bash.

A writer friend of ours reports that he was faced recently with a writer's dream: the sight of a total stranger in a diner eating slowly and raptly reading one of this writer's books. Our hero pinched himself to see if he was awake, and he was; he sat quiet awhile and pondered which of many delectable ways and means he might use to start the conversation which would have to reach the wonderful, "You mean *you* wrote this?" and the quite-casual, "Why, yes, it happens I did."

Deciding at last on the double-reverse, or hyperbolic approach, the writer leaned over to the diner and said, "Hey, Mac, what you want to read that kind of junk for?"

The diner slowly closed the book and gazed at it as if he'd never really seen it before. Then he nodded and said, "I think you got something there," tipped the book off the counter onto the floor, ate the rest of his French apple pie and left without looking back.

We don't quite know what to do with this story either, so you can have it too.

THE EDITOR

Retief knew the importance of sealed orders——

and the need to keep them that way!

by KEITH LAUMER **ILLUSTRATED BY GAUGHAN**

RETIEF

OF THE RED-TAPE MOUNTAIN

"IT'S true," Consul Passwyn said, "I requested assignment as principal officer at a small post. But I had in mind one of those charming resort worlds, with only an occasional visa problem, or perhaps a distressed spaceman or two a year. Instead, I'm zoo-keeper to these confounded settlers. And not for one world, mind you, but eight!" He stared glumly at Vice-Consul Retief.

"Still," Retief said, "it gives an opportunity to travel—"

"Travel!" the consul barked. "I hate travel. Here in this backwater system particularly—" He paused, blinked at Retief and cleared his throat. "Not that a bit of travel isn't an excellent thing for a junior officer. Marvelous experience."

He turned to the wall-screen and pressed a button. A system triagram appeared: eight luminous green dots arranged around a larger disk representing the primary. He picked up a pointer, indicating the innermost planet.

"The situation on Adobe is nearing crisis. The confounded settlers—a mere handful of them—have managed, as usual, to stir up trouble with an intelligent indigenous life form, the Jaq. I can't think why they bother, merely for a few oases among the endless deserts. However I have, at last, received authorization from Sector Headquarters to take certain action." He swung

back to face Retief. "I'm sending you in to handle the situation, Retief—under sealed orders." He picked up a fat buff envelope. "A pity they didn't see fit to order the Terrestrial settlers out weeks ago, as I suggested. Now it is too late. I'm expected to produce a miracle—a rapprochement between Terrestrial and Adoban and a division of territory. It's idiotic. However, failure would look very bad in my record, so I shall expect results."

He passed the buff envelope across to Retief.

"I understood that Adobe was uninhabited," Retief said, "until the Terrestrial settlers arrived."

"Apparently, that was an erroneous impression." Passwyn fixed Retief with a watery eye. "You'll follow your instructions to the letter. In a delicate situation such as this, there must be no impulsive, impromptu element introduced. This approach has been worked out in detail at Sector. You need merely implement it. Is that entirely clear?"

"Has anyone at Headquarters ever visited Adobe?"

"Of course not. They all hate travel. If there are no other questions, you'd best be on your way. The mail run departs the dome in less than an hour."

"What's this native life form like?" Retief asked, getting to his feet.

"When you get back," said Passwyn, "you tell me."

THE mail pilot, a leathery veteran with quarter-inch whiskers, spat toward a stained corner of the compartment, leaned close to the screen.

"They's shootin' goin' on down there," he said. "See them white puffs over the edge of the desert?"

"I'm supposed to be preventing the war," said Retief. "It looks like I'm a little late."

The pilot's head snapped around. "War?" he yelped. "Nobody told me they was a war goin' on on 'Dobe. If that's what that is, I'm gettin' out of here."

"Hold on," said Retief. "I've got to get down. They won't shoot at you."

"They shore won't, sonny. I ain't givin' 'em the chance." He started punching keys on the console. Retief reached out, caught his wrist.

"Maybe you didn't hear me. I said I've got to get down."

The pilot plunged against the restraint, swung a punch that Retief blocked casually. "Are you nuts?" the pilot screeched. "They's plenty shootin' goin' on fer me to see it fifty miles out."

"The mail must go through, you know."

"Okay! You're so dead set on gettin' killed, you take the skiff. I'll tell 'em to pick up the remains next trip."

"You're a pal. I'll take your offer."

The pilot jumped to the lifeboat hatch and cycled it open. "Get in. We're closin' fast. Them birds might take it into their heads to lob one this way..."

Retief crawled into the narrow cockpit of the skiff, glanced over the controls. The pilot ducked out of sight, came back, handed Retief a heavy old-fashioned power pistol. "Long as you're goin' in, might as well take this."

"Thanks." Retief shoved the pistol in his belt. "I hope you're wrong."

"I'll see they pick you up when the shootin's over—one way or another."

The hatch clanked shut. A moment later there was a jar as the skiff dropped away, followed by heavy buffeting in the backwash from the departing mail boat. Retief watched the tiny screen, hands on the manual controls. He was dropping rapidly: forty miles, thirty-nine...

A crimson blip showed on the screen, moving out.

Retief felt sweat pop out on his forehead. The red blip meant heavy radiation from a warhead. Somebody was playing around with an outlawed but by no means unheard of fission weapon. But maybe it was just on a high trajectory and had no connection with the skiff...

Retief altered course to the south. The blip followed.

He checked instrument readings, gripped the controls, watching. This was going to be tricky. The missile bored closer. At five miles Retief threw the light skiff into maximum acceleration, straight toward the oncoming bomb. Crushed back in the padded seat, he watched the screen, correcting course minutely. The proximity fuse should be set for no more than 1000 yards.

At a combined speed of two miles per second, the skiff flashed past the missile, and Retief was slammed violently against the restraining harness in the concussion of the explosion...a mile astern, and harmless.

Then the planetary surface was rushing up with frightening speed. Retief shook his head, kicked in the emergency retro-drive. Points of light arced up from the planet face below. If they were ordinary chemical warheads the skiff's meteor screens should handle them. The screen flashed brilliant white, then went dark. The skiff flipped on its back. Smoke filled the tiny compartment. There was a series of shocks, a final bone-shaking concussion, then stillness, broken by the ping of hot metal contracting.

COUGHING, Retief disengaged himself from the shock-webbing. He beat out sparks in his lap, groped underfoot for the hatch and

wrenched it open. A wave of hot jungle air struck him. He lowered himself to a bed of shattered foliage, got to his feet...and dropped flat as a bullet whined past his ear.

He lay listening. Stealthy movements were audible from the left.

He inched his way to the shelter of a broad-boled dwarf tree. Somewhere a song lizard burbled. Whining insects circled, scented alien life, buzzed off. There was another rustle of foliage from the underbrush five yards away. A bush quivered, then a low bough dipped.

Retief edged back around the trunk, eased down behind a fallen log. A stocky man in grimy leather shirt and shorts appeared, moving cautiously, a pistol in his hand.

As he passed, Retief rose, leaped the log and tackled him.

They went down together. The stranger gave one short yell, then struggled in silence. Retief flipped him onto his back, raised a fist—

"Hey!" the settler yelled. "You're as human as I am!"

"Maybe I'll look better after a shave," said Retief. "What's the idea of shooting at me?"

"Lemme up. My name's Potter. Sorry 'bout that. I figured it was a Flap-jack boat; looks just like 'em. I took a shot when I saw something move. Didn't know it was a Terrestrial. Who are you? What you doin' here? We're pretty close to the edge of the oasis. That's Flap-jack country over there." He waved a hand toward the north, where the desert lay.

"I'm glad you're a poor shot. That missile was too close for comfort."

"Missile, eh? Must be Flap-jack artillery. We got nothing like that."

"I heard there was a full-fledged war brewing," said Retief. "I didn't expect—"

"Good!" Potter said. "We figured a few of you boys from Ivory would be joining up when you heard. You are from Ivory?"

"Yes. I'm—"

"Hey, you must be Lemuel's cousin. Good night! I pretty near made a bad mistake. Lemuel's a tough man to explain something to."

"I'm—"

"Keep your head down. These damn Flap-jacks have got some wicked hand weapons. Come on..." He moved off silently on all fours. Retief followed. They crossed two hundred yards of rough country before Potter got to his feet, took out a soggy bandana and mopped his face.

"You move good for a city man. I thought you folks on Ivory just sat under those domes and read dials. But I guess bein' Lemuel's cousin you was raised different."

"As a matter of fact—"

"Have to get you some real clothes, though. Those city duds don't stand up on 'Dobe."

Retief looked down at the

charred, torn and sweat-soaked powder-blue blazer and slacks.

"This outfit seemed pretty rough-and-ready back home," he said. "But I guess leather has its points."

"Let's get on back to camp. We'll just about make it by sundown. And, look. Don't say anything to Lemuel about me thinking you were a Flap-jack."

"I won't, but—"

Potter was on his way, loping off up a gentle slope. Retief pulled off the sodden blazer, dropped it over a bush, added his string tie and followed Potter.

II

"WE'RE damn glad you're here, mister," said a fat man with two revolvers belted across his paunch. "We can use every hand. We're in bad shape. We ran into the Flap-jacks three months ago and we haven't made a smart move since. First, we thought they were a native form we hadn't run into before. Fact is, one of the boys shot one, thinkin' it was fair game. I guess that was the start of it." He stirred the fire, added a stick.

"And then a bunch of 'em hit Swazey's farm here," Potter said. "Killed two of his cattle, and pulled back."

"I figure they thought the cows were people," said Swazey. "They were out for revenge."

"How could anybody think a cow was folks?" another man put in. "They don't look nothin' like—"

"Don't be so dumb, Bert," said Swazey. "They'd never seen Terries before. They know better now."

Bert chuckled. "Sure do. We showed 'em the next time, didn't we, Potter? Got four."

"They walked right up to my place a couple days after the first time," Swazey said. "We were ready for 'em. Peppered 'em good. They cut and run."

"Flopped, you mean. Ugliest lookin' critters you ever saw. Look just like a old piece of dirty blanket humpin' around."

"It's been goin' on this way ever since. They raid and then we raid. But lately they've been bringing some big stuff into it. They've got some kind of pint-sized airships and automatic rifles. We've lost four men now and a dozen more in the freezer, waiting for the med ship. We can't afford it. The colony's got less than three hundred able-bodied men."

"But we're hanging onto our farms," said Potter. "All these oases are old sea-beds—a mile deep, solid t o p s o i l. And there's a couple of hundred others we haven't touched yet. The Flap-jacks won't get 'em while there's a man alive."

"The whole system needs the food we can raise," Bert said. "These farms we're try-

ing to start won't be enough but they'll help."

"We been yellin' for help to the CDT, over on Ivory," said Potter. "But you know these Embassy stooges."

"We heard they were sending some kind of bureaucrat in here to tell us to get out and give the oases to the Flapjacks," said Swazey. He tightened his mouth. "We're waitin' for him..."

"Meanwhile we got reinforcements comin' up, eh, boys?" Bert winked at Retief. "We put out the word back home. We all got relatives on Ivory and Verde."

"Shut up, you damn fool!" a deep voice grated.

"Lemuel!" Potter said. "Nobody else could sneak up on us like that."

"If I'd a been a Flap-jack; I'd of et you alive," the newcomer said, moving into the ring of fire, a tall, broad-faced man in grimy leather. He eyed Retief.

"Who's that?"

"What do ya mean?" Potter spoke in the silence. "He's your cousin..."

"He ain't no cousin of mine," Lemuel said slowly. He stepped to Retief.

"Who you spyin' for, stranger?" he rasped.

RETIEF got to his feet. "I think I should explain—"

A short-nosed automatic appeared in Lemuel's hand, a clashing note against his fringed buckskins.

"Skip the talk. I know a fink when I see one."

"Just for a change, I'd like to finish a sentence," said Retief. "And I suggest you put your courage back in your pocket before it bites you."

"You talk too damned fancy to suit me."

"Maybe. But I'm talking to suit me. Now, for the last time, put it away."

Lemuel stared at Retief. "You givin' me orders...?"

Retief's left fist shot out, smacked Lemuel's face dead center. He stumbled back, blood starting from his nose; the pistol fired into the dirt as he dropped it. He caught himself, jumped for Retief... and met a straight right that snapped him onto his back: out cold.

"Wow!" said Potter. "The stranger took Lem...in two punches!"

"One," said Swazey. "That first one was just a love tap."

Bert froze. "Hark, boys," he whispered. In the sudden silence a night lizard called. Retief strained, heard nothing. He narrowed his eyes, peered past the fire—

With a swift lunge he seized up the bucket of drinking water, dashed it over the fire, threw himself flat. He heard the others hit the dirt a split second behind him.

"You move fast for a city man," breathed Swazey beside him. "You see pretty good too. We'll split and take 'em from two sides. You and Bert from

the left, me and Potter from the right."

"No," said Retief. "You wait here. I'm going out alone."

"What's the idea...?"

"Later. Sit tight and keep your eyes open." Retief took a bearing on a treetop faintly visible against the sky and started forward.

FIVE minutes' stealthy progress brought him to a slight rise of ground. With infinite caution he raised himself, risking a glance over an outcropping of rock.

The stunted trees ended just ahead. Beyond, he could make out the dim contour of rolling desert. Flap-jack country. He got to his feet, clambered over the stone—still hot after a day of tropical heat—and moved forward twenty yards. Around him he saw nothing but drifted sand, palely visible in the starlight, and the occasional shadow of jutting shale slabs. Behind him the jungle was still.

He sat down on the ground to wait.

It was ten minutes before a movement caught his eye. Something had separated itself from a dark mass of stone, glided across a few yards of open ground to another shelter. Retief watched. Minutes passed. The shape moved again, slipped into a shadow ten feet distant. Retief felt the butt of the power pistol with his elbow. His guess had better be right this time...

There was a sudden rasp, like leather against concrete, and a flurry of sand as the Flap-jack charged.

Retief rolled aside, then lunged, threw his weight on the flopping Flap-jack—a yard square, three inches thick at the center and all muscle. The ray-like creature heaved up, curled backward, its edge rippling, to stand on the flattened rim of its encircling sphincter. It scrabbled with prehensile fringe-tentacles for a grip on Retief's shoulders. He wrapped his arms around the alien and struggled to his feet. The thing was heavy. A hundred pounds at least. Fighting as it was, it seemed more like five hundred.

The Flap-jack reversed its tactics, went limp. Retief grabbed, felt a thumb slip into an orifice—

The alien went wild. Retief hung on, dug the thumb in deeper.

"Sorry, fellow," he muttered between clenched teeth. "Eye-gouging isn't gentlemanly, but it's effective..."

The Flap-jack fell still, only its fringes rippling slowly. Retief relaxed the pressure of his thumb; the alien gave a tentative jerk; the thumb dug in.

The alien went limp again, waiting.

"Now we understand each other," said Retief. "Take me to your leader."

TWENTY minutes' walk into the desert brought Retief to a low rampart of thorn branches: the Flap-jacks' outer defensive line against Terry forays. It would be as good a place as any to wait for the move by the Flap-jacks. He sat down and eased the weight of his captive off his back, but kept a firm thumb in place. If his analysis of the situation was correct, a Flap-jack picket should be along before too long...

A penetrating beam of red light struck Retief in the face, blinked off. He got to his feet. The captive Flap-jack rippled its fringe in an agitated way. Retief tensed his thumb in the eye-socket.

"Sit tight," he said. "Don't try to do anything hasty..." His remarks were falling on deaf ears—or no ears at all—but the thumb spoke as loudly as words.

There was a slither of sand. Another. He became aware of a ring of presences drawing closer.

Retief tightened his grip on the alien. He could see a dark shape now, looming up almost to his own six-three. It looked like the Flap-jacks came in all sizes.

A low rumble sounded, like a deep-throated growl. It strummed on, faded out. Retief cocked his head, frowning.

"Try it two octaves higher," he said.

"Awwrrp! Sorry. Is that better?" a clear voice came from the darkness.

"That's fine," Retief said. "I'm here to arrange a prisoner exchange."

"Prisoners? But we have no prisoners."

"Sure you have. Me. Is it a deal?"

"Ah, yes, of course. Quite equitable. What guarantees do you require?"

"The word of a gentleman is sufficient." Retief released the alien. It flopped once, disappeared into the darkness.

"If you'd care to accompany me to our headquarters," the voice said, "we can discuss our mutual concerns in comfort."

"Delighted."

Red lights blinked briefly. Retief glimpsed a gap in the thorny barrier, stepped through it. He followed dim shapes across warm sand to a low cave-like entry, faintly lit with a reddish glow.

"I must apologize for the awkward design of our comfort-dome," said the voice. "Had we known we would be honored by a visit—"

"Think nothing of it," Retief said. "We diplomats are trained to crawl."

Inside, with knees bent and head ducked under the five-foot ceiling, Retief looked around at the walls of pink-toned nacre, a floor like burgundy-colored glass spread with silken rugs and a low table of polished red granite that stretched down the center of the spacious room, set out

with silver dishes and rose-crystal drinking-tubes.

III

"LET me congratulate you," the voice said.

Retief turned. An immense Flap-jack, hung with crimson trappings, rippled at his side. The voice issued from a disk strapped to its back. "You fight well. I think we will find in each other worthy adversaries."

"Thanks. I'm sure the test would be interesting, but I'm hoping we can avoid it."

"Avoid it?" Retief heard a low humming coming from the speaker in the silence. "Well, let us dine," the mighty Flap-jack said at last. "We can resolve these matters later. I am called Hoshick of the Mosaic of the Two Dawns."

"I'm Retief." Hoshick waited expectantly. "...of the Mountain of Red Tape," Retief added.

"Take place, Retief," said Hoshick. "I hope you won't find our rude couches uncomfortable." Two other large Flap-jacks came into the room, communed silently with Hoshick. "Pray forgive our lack of translating devices," he said to Retief. "Permit me to introduce my colleagues..."

A small Flap-jack rippled the chamber bearing on its back a silver tray laden with aromatic food. The waiter served the four diners, filled the drinking tubes with yellow wine. It smelled good.

"I trust you'll find these dishes palatable," said Hoshick. "Our metabolisms are much alike, I believe." Retief tried the food. It had a delicious nut-like flavor. The wine was indistinguishable from Chateau d'Yquem.

"It was an unexpected pleasure to encounter your party here," said Hoshick. "I confess at first we took you for an indigenous earth-grubbing form, but we were soon disabused of that notion." He raised a tube, manipulating it deftly with his fringe tentacles. Retief returned the salute and drank.

"Of course," Hoshick continued, "as soon as we realized that you were sportsmen like ourselves, we attempted to make amends by providing a bit of activity for you. We've ordered out our heavier equipment and a few trained skirmishers and soon we'll be able to give you an adequate show. Or so I hope."

"Additional skirmishers?" said Retief. "How many, if you don't mind my asking?"

"For the moment, perhaps only a few hundred. Thereafter...well, I'm sure we can arrange that between us. Personally I would prefer a contest of limited scope. No nuclear or radiation-effect weapons. Such a bore, screening the spawn for deviations. Though I confess we've come upon some remarkably useful sports. The rangerform such

as you made captive, for example. Simple-minded, of course, but a fantastically keen tracker."

"Oh, by all means," Retief said. "No atomics. As you pointed out, spawn-sorting is a nuisance, and then too, it's wasteful of troops."

"Ah, well, they are after all expendable. But we agree: no atomics. Have you tried the ground-gwack eggs? Rather a specialty of my Mosaic..."

"Delicious," said Retief. "I wonder. Have you considered eliminating weapons altogether?"

A scratchy sound issued from the disk. "Pardon my laughter," Hoshick said, "but surely you jest?"

"As a matter of fact," said Retief, "we ourselves seldom use weapons."

"I seem to recall that our first contact of skirmishforms involved the use of a weapon by one of your units."

"My apologies," said Retief. "The— ah— the skirmishform failed to recognize that he was dealing with a sportsman."

"Still, now that we have commenced so merrily with weapons.." Hoshick signalled and the servant refilled tubes.

"There is an aspect I haven't yet mentioned," Retief went on. "I hope you won't take this personally, but the fact is, our skirmishforms think of weapons as something one employs only in dealing with certain specific life-forms."

"Oh? Curious. What forms are those?"

"Vermin. Or 'varmints' as some call them. Deadly antagonists, but lacking in caste. I don't want our skirmishforms thinking of such worthy adversaries as yourself as varmints."

"Dear me! I hadn't realized, of course. Most considerate of you to point it out." Hoshick clucked in dismay. "I see that skirmishforms are much the same among you as with us: lacking in perception." He laughed scratchily. "Imagine considering us as—what was the word?—varmints."

"Which brings us to the crux of the matter. You see, we're up against a serious problem with regard to skirmishforms. A low birth rate. Therefore we've reluctantly taken to substitutes for the mass actions so dear to the heart of the sportsman. We've attempted to put an end to these contests altogether..."

Hoshick coughed explosively, sending a spray of wine into the air. "What are you saying?" he gasped. "Are you proposing that Hoshick of the Mosaic of the Two Dawns abandon honor...?"

"Sir!" said Retief sternly. "You forget yourself. I, Retief of the Red Tape Mountain, make an alternate proposal more in keeping with the newest sporting principles."

"New?" cried Hoshick. "My

dear Retief, what a pleasant surprise! I'm enthralled with novel modes. One gets so out of touch. Do elaborate."

"It's quite simple, really. Each side selects a representative and the two individuals settle the issue between them."

"I...um...fear I don't understand. What possible significance could one attach to the activities of a couple of random skirmishforms?"

"I haven't made myself clear," said Retief. He took a sip of wine. "We don't involve the skirmishforms at all. That's quite passe."

"You don't mean...?"

"That's right. You and me."

OUTSIDE on the starlit sand Retief tossed aside the power pistol, followed it with the leather shirt Swazey had lent him. By the faint light he could just make out the towering figure of the Flap-jack rearing up before him, his trappings gone. A silent rank of Flap-jack retainers were grouped behind him.

"I fear I must lay aside the translator now, Retief," said Hoshick. He sighed and rippled his fringe tentacles. "My spawn-fellows will never credit this. Such a curious turn fashion has taken. How much more pleasant it is to observe the action of the skirmishforms from a distance."

"I suggest we use Tennessee rules," said Retief. "They're very liberal. Biting, gouging, stomping, kneeing and of course choking, as well as the usual punching, shoving and kicking."

"Hmmm. These g a m b i t s seem geared to forms employing rigid endo-skeletons; I fear I shall be at a disadvantage."

"Of course," Retief said, "if you'd prefer a more plebeian type of contest..."

"By no means. But perhaps we could rule out tentacle-twisting, just to even it."

"Very well. Shall we begin?"

With a rush Roshick threw himself at Retief, who ducked, whirled, and leaped on the Flap-jack's back...and felt himself flipped clear by a mighty ripple of the alien's slab-like body. Retief rolled aside as Hoshick turned on him; he jumped to his feet and threw a right hay-maker to Hoshick's mid-section. The alien whipped his left fringe around in an arc that connected with Retief's jaw, sent him spinning onto his back...and Hoshick's weight struck him.

Retief twisted, tried to roll. The flat body of the alien blanketed him. He worked an arm free, drumming blows on the leathery back. Hoshick nestled closer.

Retief's air was running out. He heaved up against the smothering weight. Nothing budged.

It was like burial under a dump-truck-load of concrete.

He remembered the ranger-form he had captured. The

sensitive orifice had been placed ventrally, in what would be the thoracic area...

He groped, felt tough hide set with horny granules. He would be missing skin tomorrow...if there was a tomorrow. His thumb found the orifice and probed.

The Flap-jack recoiled. Retief held fast, probed deeper, groping with the other hand. If the alien were bilaterally symmetrical there would be a set of ready made handholds...

THERE were.

Retief dug in and the Flap-jack writhed, pulled away. Retief held on, scrambled to his feet, threw his weight against the alien and fell on top of him, still gouging. Hoshick rippled his fringe wildly, flopped in terror, then went limp.

Retief relaxed, released his hold and got to his feet, breathing hard. Hoshick humped himself over onto his ventral side, lifted and moved gingerly over to the sidelines. His retainers came forward, assisted him into his trappings, strapped on the translator. He sighed heavily, adjusted the volume.

"There is much to be said for the old system," he said. "What a burden one's sportsmanship places on one at times."

"Great sport, wasn't it?" said Retief. "Now, I know you'll be eager to continue. If you'll just wait while I run back and fetch some of our gougerforms—"

"May hide-ticks devour the gougerforms!" Hoshick bellowed. "You've given me such a sprong-ache as I'll remember each spawning-time for a year."

"Speaking of hide-ticks," said Retief, "we've developed a biterform—"

"Enough!" Hoshick roared, so loudly that the translator bounced on his hide. "Suddenly I yearn for the crowded yellow sands of Jaq. I had hoped..." He broke off, drew a rasping breath. "I had hoped, Retief," he said, speaking sadly now, "to find a new land here where I might plan my own Mosaic, till these alien sands and bring forth such a crop of paradise-lichen as should glut the markets of a hundred worlds. But my spirit is not equal to the prospect of biterforms and gougerforms without end. I am shamed before you..."

"To tell you the truth, I'm old-fashioned myself. I'd rather watch the action from a distance too."

"But surely your spawn-fellows would never condone such an attitude."

"My spawn-fellows aren't here. And besides, didn't I mention it? No one who's really in the know would think of engaging in competition by mere combat if there were any other way. Now, you mentioned tilling the sand, raising

lichens—things like that—"

"That on which we dined but now," said Hoshick, "and from which the wine is made."

"The big news in fashionable diplomacy today is farming competition. Now, if you'd like to take these deserts and raise lichen, we'll promise to stick to the oases and [illegible] vegetables."

Hoshick curled his back in attention. "Retief, you're quite serious? You would leave all the fair sand hills to us?"

"The whole works, Hoshick. I'll take the oases."

Hoshick rippled his fringes ecstatically. "Once again you have outdone me, Retief," he cried. "This time, in generosity."

"We'll talk over the details later. I'm sure we can establish a set of rules that will satisfy all parties. Now I've got to get back. I think some of the gougerforms are waiting to see me."

IV

IT was nearly dawn when Retief gave the whistled signal he had agreed on with Potter, then rose and walked into the camp circle. Swazey stood up.

"There you are," he said. "We been wonderin' whether to go out after you."

Lemuel came forward, one eye black to the cheekbone. He held out a raw-boned hand. "Sorry I jumped you, stranger. Tell you the truth, I thought you was some kind of stool-pigeon from the CDT."

Bert came up behind Lemuel. "How do you know he ain't, Lemuel?" he said. "Maybe he—"

Lemuel floored Bert with a backward sweep of his arm. "Next cotton-picker says some embassy Johnny can cool me gets worse'n that."

"Tell me," said Retief. "How are you boys fixed for wine?"

"Wine? Mister, we been livin' on stump water for a year now. 'Dobe's fatal to the kind of bacteria it takes to ferment likker."

"Try this." Retief handed over a sqat jug. Swazey drew the cork, sniffed, drank and passed it to Lemuel.

"Mister, where'd you get that?"

"The Flap-jacks make it. Here's another question for you: Would you concede a share in this planet to the Flap-jacks in return for a peace guarantee?"

At the end of a half hour of heated debate Lemuel turned to Retief. "We'll make any reasonable deal," he said. "I guess they got as much right here as we have. I think we'd agree to a fifty-fifty split. That'd give about a hundred and fifty oases to each side."

"What would you say to keeping all the oases and giving them the desert?"

Lemuel reached for the wine jug, eyes on Retief.

"Keep talkin', mister," he said. "I think you got yourself a deal."

CONSUL Passwyn glanced up at Retief, went on perusing a paper.

"Sit down, Retief," he said absently. "I thought you were over on Pueblo, or Mud-flat, or whatever they call that desert."

"I'm back."

Passwyn eyed him sharply. "Well, well, what is it you need, man? Speak up. Don't expect me to request any military assistance, no matter how things are..."

Retief passed a bundle of documents across the desk. "Here's the Treaty. And a Mutual Assistance Pact declaration and a trade agreement."

"Eh?" Passwyn picked up the papers, riffled through them. He leaned back in his chair, beamed.

"Well, Retief. Expeditiously handled." He stopped, blinked at Retief. "You seem to have a bruise on your jaw. I hope you've been conducting yourself as befits a member of the Embassy staff."

"I attended a sporting event," Retief said. "One of the players got a little excited."

"Well...it's one of the hazards of the profession. One must pretend an interest in such matters." Passwyn rose, extended a hand. "You've done well, my boy. Let this teach you the value of following instructions to the letter."

Outside, by the hall incinerator drop, Retief paused long enough to take from his briefcase a large buff envelope, still sealed, and drop it in the slot. **END**

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

by **THEODORE L. THOMAS**

THE SPY

He knew how to serve his people and make his name immortal. It was easy. He just had to die!

JEHN Dofan was a very human-looking and highly intelligent young man, but sometimes he did not show good sense. Any young man might meet a girl night after night in an apple orchard, but Dofan had to do it in time of war, behind enemy lines, with the daughter of the mayor. On top of that he had to try to pry information out of her.

Even this might have been all right if Dofan had used a little more sense. After four consecutive nights of pressings and squeezings and heavy breathings, one does not maintain a stony silence when a girl like Betty Fuller nestles up closer and says, "We will be so happy together." The situation swiftly deteriorated after that. He wound up under arrest.

Flung into a root cellar, Jehn Dofan underwent a short but intense period of questioning by three burly soldiers, aided by the butt end of their flintlock rifles and directed by a second lieutenant bent on promotion. Dofan told them nothing. But it did not matter. As the soldiers left, the second lieutenant said, drawing himself to attention, "You hang at dawn, scum. We know how to treat spies."

For the first time Dofan saw that he was in trouble.

Betty Fuller rushed in as the soldiers went out. She flung herself on Dofan and covered his bloodied face with kisses and wept into the hol-

low of his neck. "My darling," she wailed, "what have I done to you?"

With this to work on, Dofan might have extricated himself even then, for Betty Fuller's father was the mayor, and a friendly mayor wields much influence even with the military if he puts his mind to it. But Dofan, although very human-looking and highly intelligent, did not show good sense for the second time in the same night.

He looked at Betty Fuller coldly and said, "You've done enough. Why don't you let me alone?"

Her eyes widened in disbelief and then flashed in hatred. She turned and tapped calmly on the door, and the soldiers let her out.

DAWN was close, and Dofan had no time to lose. He went to a corner of the root cellar and listened to make certain no one was coming. With his right thumb he probed deep up under his right jaw. He found the tiny button imbedded there, and he pushed it and held it.

He said softly, "Jehn Dofan calling Base. Jehn Dofan calling..."

"We have you, Dofan. Talk."

"I'm captured, heavily guarded. They plan to hang me at dawn, less than an hour. Condition appears desperate. I need help."

"Will this rescue constitute a major interference with the natives? And, if so, are you willing to stand court-martial?"

"Yes," said Dofan. "I believe it will require major interference, and I am willing to stand court-martial."

"Stand by for instructions."

Dofan removed his thumb and paced back and forth in the root cellar in the candlelight.

Now that he had committed himself, he was a little sorry. But there seemed no other way out. This would spoil a perfect record here on the planet Earth. Betty Fuller had succeeded in ruining him. He would be drummed out of the Controllers, and she and the other Earth people did not even know such an organization existed. There would come a time when he could...

A series of sharp buzzes echoed inside his head. It startled him; he had not expected his instructions so soon. He went to the corner and pressed the switch under his jaw and said, "Jehn Dofan."

"This is Charn Dofan. How are you, brother?"

Dofan felt his breath catch in his throat, and for a moment he could not speak. A great feeling of relief swept over him. Charn Dofan was here, his older brother, come to him in a time of trouble as always.

He said, "Charn, it is good to hear your voice. Where

are you calling from, brother?"

"About a mile away. I command a troop of cavalry stationed in Brooklyn. I heard your call to Base and came out. Are you well?"

"Very well, brother. And you?"

"Very well."

A silence fell. The silence rested uncomfortably and strangely with Jehn Dofan. There had never been any strained silences between him and his brother. Something was wrong. He asked, "Is all well at home?"

There was a perceptible pause before the answer came. "Our parents and our family are all in good health." Again the silence.

Jehn Dofan said, "Tell me what is wrong, Charn. Base will call soon to tell me of the rescue procedure. What is it?"

A pause, then Charn Dofan began to speak. "Our Islands at home are ready to demand full statehood. The Mainlanders are trying to find some way to keep us out. A vote will be taken next week. As things stand now, we can just about muster the necessary strength, but it won't take much to change things. We won't get another chance for a long while. We'll have to keep paying the taxes, letting them bleed us white, controlling our production."

Jehn Dofan nodded in understanding. "Yes, our people have worked toward statehood for a long time. I hope we make it."

Again the silence. Jehn Dofan was puzzled.

He said, "What is wrong? What can we do about it from here?"

THIS time his brother's words poured out, wrenched from the heart. "Base commander is a Mainlander! He will have to interfere openly with the natives to rescue you, and this will reflect on all the Islanders. No question about it, Jehn. It will tip the vote the wrong way. Your rescue will be an international incident back home."

Jehn Dofan shook his head regretfully and said, "I suppose you are right. But I don't know how we can stop him from here. We are..." And then he understood.

He felt sick to his stomach, and he began to perspire. His breath caught in his throat. His heart pounded. He refused to accept the full realization—kept thrusting it out of his mind—but it kept intruding.

His brother continued, "Base will be calling in a few moments. I will be nearby, no matter what happens. Call on me for anything. I will abide by your decision. Good-by." The radio fell silent before Jehn Dofan could speak.

He was alone in the cellar. He slumped to the dirt, too weak to pace.

He was frightened. He had not seriously considered the possibility of dying on this planet. Yet here he was, in a position where his own brother had to point out the desirability of letting himself be executed instead of rescued. The Islands needed a hero now, not a goat. He needed time to think this out.

But there was no time. The buzzer sounded inside his head. He jumped. He went to the corner and pushed the switch and spoke.

"Base commander," was the response, and without further preamble the commander launched into a description of the rescue plans. In spite of the turmoil that raged in his mind, Dofan recognized that the plans were more violent and complex than they needed to be. It was apparent that the commander was seizing the opportunity to make trouble. The recognition steeled his mind.

"There will be no rescue, Commander. I have decided that I do not want to be the cause of such open interference."

The commander started to speak, but then fell silent, recognizing the impropriety of arguing with Dofan about such a matter. But his fury was apparent. Feeling it, Dofan said, "There is no need to talk further, Commander. I sign off now. Do not risk open interference by contacting me again. Good-by, sir."

THEY came for him shortly. They marched him between two columns of red-coated soldiers to the slow beat of muffled drums. He climbed the gallows steps in the bright morning sunshine and looked out over the Long Island countryside. As they adjusted the noose around his neck, his eyes swept the assembled crowd. There to the left, among the others, stood a tall, black-haired figure in a red coat. The eyes and nose were the same as his eyes and nose, and he looked at his brother and smiled.

A few feet from his brother, all unknowing, stood Betty Fuller, and for a wild moment he considered calling out to her for help. He saw the sneer on her face, and he was immediately ashamed of his momentary weakness. He gritted his teeth and tried to think of a way to die well.

He looked up to the sky, in a westerly direction. He could not see it, for it was light-years away, but he knew it was there. A lovely island on another planet, bathed in warm breezes, the place where his people were.

His executioners asked him, "Do you have anything to say, schoolmaster?"

Then he knew what to do to swing the vote; it came to him all of a sudden. With his face raised toward home, he said, "I only regret that I have but one life to lose for my country." END

Remorseless? Not a bit of it, no matter what they say! Here's the genuine, inside, light-hearted story of——

DEATH AND TAXES

by H. A. HARTZELL ILLUSTRATED BY DYAS

"IT'S a crime, Your Honor," said the young man with the dreamy eyes and paint-smeared sport-shirt. "The Council not only proposes tearing down this picturesque landmark, but would thereby destroy the home of our only local ghost."

"Really, Mr. Masterson!" The mayor smiled to show he knew Jerry Masterson was only kidding, then brandished a State Highway Commission report recommending that the antiquated Waukeena Lighthouse be demolished. "Mr. Masterson, we respect your feelings as an artist, and are well aware of the local superstition regarding the ghost of Captain MacGreggor, but this building is over seventy years old and needs expensive repairs. The financial burden is too great for our metropolis of less than fifteen hundred souls. The State has disavowed responsibility, and—"

"Your Honor!"

"The chair recognizes Mr. Higgins."

"As president of the Historical Soci[illegible] I wish to state we vigorously oppose the wrecking of this building. One by one, our landmarks have fallen. Are we to hand down to our children a community without pride of ancestry? Are we—?"

"Your Honor," bellowed another voice. "As a member of the Taxpayers League..."

For two hours, sentiment battled hotly with double-entry bookkeeping. Then the City Council expressed its deep regrets to the Historical Society—and unanimously accepted the bid of Sam Schultz Salvage Company. Mr. Schultz

handed the Council his check for five hundred dollars and was authorized to begin wrecking immediately.

"First thing tomorrow morning," Mr. Schultz promised.

TOMORROW morning! As he walked into the spring night, toward the old, decaying house where he lived alone, Jerry Masterson felt sadness. His own difficulties had prepared him to admit life was geared to financial considerations. But things had come to a pretty pass when even a ghost was not safe from dollars and cents. "Poor Captain Wully," he said without realizing he spoke aloud.

"Aye, aye," said a voice. "Poor Wully MacGreggor. As a ghost in good standing, a dues-paying member of Asmodeus Local of the United Lighthouse Haunters of America, Wully never done nothin' to deserve this. Evicted! Got a smoke, matey?"

Jerry Masterson did a double-take. Out of reflex courtesy, he proffered a cigarette and was about to strike a match when his companion reached slightly to the left, where several coals glowed in mid-air. Selecting one, the stranger said, "Thank you, Junior. You can go now." He turned, lit Jerry's cigarette and his own.

"All right, joker," said Jerry. "Show me how you did it and I'll show you a couple of card tricks and a disappearing penny routine."

"Later," said the stranger. "Right now, matey, my sails is draggin' and I need spiritual reinforcement—liquid. And *you're* buying."

"There's a fifth of Scotch in my studio, but I'm not pouring for any phony tricksters. I've been saving it till I sold a canvas."

"Scotch," sighed the stranger ecstatically. "Shades of the Loch Ness Monster! Quit scratching, Gertrude."

"Gertrude?"

"My cat—she's black. A handsome beastie if you overlook a hole in her head. A twenty-two caliber hole. Gertrude, materialize for the nice man."

Nothing happened, and Jerry diplomatically sought to ease a situation that was rapidly becoming embarrassing. "Maybe she's bashful."

"Not Gertrude. Just temperamental. She could materialize if she wanted to. She doesn't want to. Now take Junior..."

"Junior?"

"He's the conscientious type. Tries too hard, poor boy."

"About that Scotch," said Jerry. "You don't think maybe a couple of cups of black coffee..."

The stranger's face registered horror—and trust betrayed. "For shame, laddie. To be insulted in my darkest hour! Me, Captain Wully MacGreggor!"

"Sure. You're Wully MacGreggor—and I'm Napoleon."

"Watch."

There was nothing to watch. The stranger had disappeared. A disembodied voice said, "Now about that Scotch? If Waukeena light is being torn down tomorrow, I'll be homeless. I've got a lot of haunting to do in the little time that's left. And here we stand, waggin' our jaws."

Jerry's first impulse was to run like hell. "But I don't believe in ghosts!" His voice sounded.

"Of course you do. If you didn't, you couldn't have seen me."

He'd heard of self-hypnosis—apparently the session with the Mayor had upset him. "All right, so you're Wully MacGreggor. Why pick on me?"

"Because I like you," said the ghost. "You said a kind word for me to the City Council and I'd like to do something nice for you."

"If you can't help yourself, I don't see how you're going to be much help to me, but what've I got to lose?" He was too numb to worry further. Ghosts, yet...!

NEXT morning, Jerry Masterson awoke with a hangover. He dimly remembered floating lights, red, yellow, blue and green. He remembered Captain Wully scaring a couple of lovers with noises the young lady described as "something like bagpipes in an echo chamber." And he seemed to remember that, toward the end of the evening, Gertrude had deigned to materialize—along with a headless black ox and a white stag.

He shook his head and reached for the aspirin. "As of now," he promised himself, "I'm on the wagon." He seemed to recall a snake too, a seven-headed snake with a gleaming carbuncle in the middle head. *Permanently* on the wagon! A scraping noise came from above. He listened. The noise occurred again. It seemed to emanate from the tower room on the third floor. He raced up the winding Victorian staircase, on up the narrow stairs to the attic, and stopped.

From behind the tower room door, came thin, eerie skirling of bagpipes.

"Hey, you in there," he called.

"Matey!" boomed Captain Wully's voice. "Come on in."

Captain Wully was seated on an old sea-chest, the bagpipes still tucked under his arm. "Hope my practicing didn't disturb you. I play second bagpipe in the banshee band."

"But the scraping noise..."

"My sea-chest. I had a little trouble getting you home by cockcrow, and I had to move the sea-chest on overtime. I want to say right now it was right decent of you to offer me a home on such short acquaintance. I appreciate it,

and I promise to show my—"

"Look," said Jerry. "All this time I was being so big-hearted, did I also say I was going to have to sell the house for non-payment of taxes?"

"You didn't. If I'd a-known that, I'd put you wise to grabbing Celeste's carbuncle. It's good luck."

"It didn't bring *you* any luck."

"I'm not eligible. Employees, relatives etc."

"Why can't I get it now?"

"Too late. Celeste only materializes once every seven years. Those canvases you mentioned. For sale?"

"No bidders, and the critics all agree. Competent draftsmanship, highly finished technique—but c a r e f u l l y unimaginative, middle-class."

"The pictures—where are they now?"

"Downstairs. I was going to crate them today, and send them to the Art Festival at Northport, but I've got the shakes too bad."

Captain Wully pushed back the tam on his head, scratched his balding dome. "I've got it. You catch yourself a nap, matey. I'll crate the pictures for you and batten down the hatches all nice an' shipshape."

JERRY Masterson, when he draped himself over the bumpy carvings on the studio love seat, intended to take only a quick forty winks. But the morning was well spent when he awakened, stiff and cramped. Two sturdy crates stood near the door and, from the skylight end of the studio, wafted a rich fragrance of latakia. Captain Wully drew deeply on a Scotch briar filled with Jerry's private blend of tobacco, waved his pipe toward the easel and said, "A right bonnie lass, matey. Your betrothed?"

Jerry shook his head dolefully. "Her family are Covered Wagon. You've no idea what that means in a small town like this. My uncle lived here fifteen years and was still a 'newcomer' when he died and left me the house. I've been here two years, but that's a Johnny-come-lately to the Higginses. Her name's Heather, and I doubt if she knows I'm alive."

Captain Wully twirled his mustache, which curled luxuriantly at either end and was of an improbable shade Jerry classified as Hunter's Pink. So was his beard. "What did you say her name was?"

"Heather Higgins."

"You sighed the second time you said it, too. I just wanted to be sure."

Jerry crossed to the unfinished canvas. "Hair like sunshine on slightly oxidized copper. Eyes blue like the sea where it meets the horizon on a summer day."

"Gertrude!" yelled Captain Wully.

From the turbulence of the air current which marked Ger-

trude's passing, Jerry decided the invisible cat had been in a hurry.

"And who are *you*, and what are *you* doing here?" Captain Wully yelled at a second slipstream.

Distinctly audible was a high pitched caterwauling. In addition, there was a sound that made Jerry's curly hair crawl—the baying of a wolf?

"I better look into this," Captain Wully muttered and dashed outside. As he reached the doorway, his figure melted into transparency, then into air.

Jerry loaded the crated paintings into his car and took them to the express office. They wouldn't sell—they never did. But he couldn't afford to pass up the chance that they might.

When he returned home, there was no sign of Captain Wully, only a few paper candy wrappers on the floor. He started to pick them up, but remembered he wanted to imprison a highlight on Heather Higgins's nose and forgot the papers.

Someone had been into his paints. A tube of Payne's gray had been pressed dry. The cap was off the gamboge, and a new tube of bice green had been squeezed in the middle. Nor had the intruder bothered to scrape the palette, which gleamed with puddles of color.

A dab of ivory, the hint of rose madder and a suspicion of cadmium yellow fused under his brush tip. Creative fury struck him, and he failed to notice a figure that paused at the outside front gate. The figure stooped, picked up something, then carefully scanned the inside walkway. Here, too, she picked up something. She stooped momentarily on the front porch, and again in the hallway.

THEN Heather Higgins stood in the studio. Her gaze swept the floor, and she bent over to pick up a candy wrapper.

"You don't have to do that," Jerry said. "I was getting around to it—eventually."

She whirled to face him. Her eyes turned from azure to ultramarine. "You might tell me what's going on around here!"

"Suppose *you* tell *me*. I'm still trying to catch up with it myself."

"Thief!"

"Thief?"

"Stealing Scotch whiskey and my new plaid skirt! But you made a mistake on the rum butter toffee. I trailed the wrappers."

The Scotch whiskey and rum toffee Jerry could see a reason for—but not the plaid skirt. "So help me, I'm innocent."

"So you're innocent!" She dashed to a corner behind the easel and snatched a plaid skirt from the floor.

"You'll just have to believe

me. I had nothing to do with it."

"Oh no?"

"Look at me. Do I look like a criminal?"

As she looked her expression softened slightly, but she said, "I always picked the wrong picture in psychology tests. It's you innocent looking fellows that always turn out to be the crooks."

Jerry tried his best to look desperate. The result was too much for Heather Higgins, who laughed.

"Hold it," Jerry said. "I want to catch your eyes."

He grabbed his brush and made several quick strokes on the canvas.

"Why," she said, "it looks like *me*—a little. But I'm not that pretty."

"You are. And it'd look more like you if I didn't have to do it from memory."

And that was how Heather Higgins reluctantly happened to promise Jerry Masterson she'd return next morning for a sitting. She left, and Jerry was eating dinner when Captain Wully walked in to the whistled measures of *Comin' Through the Rye.*

"Rye!" said Jerry. "You? Rye?"

"I borrowed her old man's Scotch, if that's what you're gettin' at. And if you think I enjoyed eatin' all that candy just to leave a trail— I hope I don't see another piece of candy for three hundred years."

"Just to satisfy my curiosity," Jerry pleaded, "where does the plaid skirt come in?"

"The MacGreggor tartan? I needed a kilt."

"All of a sudden you need a kilt. Why?"

"It's a long story. But first—" he reached into a cupboard and produced Jerry's safety razor—"do you mind if I borrow this? And where do you keep the scissors?"

It took fifteen minutes to locate the scissors.

"We were d i s c u s s i n g a kilt," Jerry prompted.

"If a body kiss a body, need a body cry," sang Captain Wully's baritone.

But, eventually, Captain Wully and the scissors were seated at the table behind a round magnifying mirror. "It begins with Gertrude. You remember how she s c o o t e d through the studio this afternoon with a werewolf after her?"

"How stupid of me not to realize."

"I felt Gertrude needed help. I caught up with the werewolf and gave him a piece of my mind. 'Pretty small potatoes,' I says, 'when a werewolf chases cats. You must be pretty second-rate to have fallen so low. A regular lamb in wolf's clothing.' 'I'll have you know,' he says, 'I'm pretty hot stuff. Related to Dracula on my mammy's side, and to Frankenstein on my pappy's.' "

The scissors snipped rapidly, and bits of pink mustache

littered the unswept floor.

"'A renegade,' I says. 'Your family must be awfully proud of you. Chasing cats!' Ouch—" as the scissors slipped. "I says, 'Where do you live?' And he says, 'Down the road a piece. I'm lapdog for an Indian princess.' 'I think,' I says, usin' my head real quick like, 'I better see you home and see what your mistress has to say about this.'"

The mustache having been whittled to a tailored toothbrush, Captain Wully started on his beard. "You should see her, laddie. A real Indian princess, left over from a Lovers Leap. Bein' four hundred years old, she's real aristocracy and doesn't mingle with younger ghosts, which is why I never seen her before. Myself, I'm three score and hardly in her class. Although I must say she took a shine to me. But Indian braves don't wear beards."

Captain Wully put down the razor and revealed that he too was beardless. "Sporran, silver buckles and all the fixin's I got in my sea-chest—but my kilt went down wi' my ship."

When Captain Wully realized Heather Higgins had taken the plaid skirt home, he was inconsolable.

HEATHER Higgins kept her appointment to sit next morning. She was greeted at the mailbox by a subdued young man, who hastily shoved in his pocket a letter promising drastic action in the matter of "tax liens against property situate, to wit, etc."

"The oddest thing has happened," she said.

And Jerry knew. "The plaid skirt is gone again."

She gave him a chilly look. "See here! For a young man who claims to know nothing about—"

"It's my handyman," he babbled. "My handyman's a kleptomaniac."

"Lem Butler's the only handyman in town. Don't try to tell me Lem—"

"Since the person concerned is progressing toward a cure, I can't mention names. Couldn't you let me pay for the skirt?" It took a lot of fast talking, and it took time—but he finally diverted her attention.

She was a patient model. He quickly blocked in the flowing waves of her hair. But a listening look had come over her. Jerry listened too.

Down the stairwell drifted muted notes of a bagpipe, striving to adapt its chromatic limitations to *'Indian Love Call.'* Another instrument was audible also.

"Funny thing about this house," he said. "When I first moved in, I used to think I heard bagpipes."

"Accompanied by a glockenspiel?"

"Is that what it is?"

The upper half of a very elderly gentleman bobbed in.

"*Junior!*" bawled Captain Wully from the stairs.

"Leave me alone," pleaded the elderly gentleman. "Lemme concentrate."

Captain Wully dashed in. "For shame, Junior. *Stealing!*"

Junior's eyes filled with tears. "Just one more nip, and I know I could have relaxed enough to finish materializing."

Heather's fascinated gaze wavered between the bottomless Junior and Captain Wully's kilt. The kilt had a zipper placket exactly like a lady's skirt. "I think I'm losing my mind," she said.

Jerry Masterson attempted to explain the inexplicable. He recounted events of the preceding several days and concluded, "No matter what you think, you couldn't see him if you didn't believe."

"What about the glockenspiel?" she asked weakly.

"That's Red Skeleton," said Captain Wully. "He uses a couple of ball-peen hammers on his ribs. We was tunin' up to serenade Pocahauntus."

"The cat," said Heather. "She's left out."

"Oh, no, she ain't. Gertrude sings coloratura."

"*That* even *I* don't believe," said Jerry.

JUNIOR'S upper half poised before the easel, and he flourished a brush. "Just a touch about the eyes. And another here." He flicked at the mouth.

"Get away from there!" yelled Jerry.

Junior burst into tears again. "I was only trying to help. Besides, it did need—"

"Well, I'll be..." Jerry looked at the canvas. "Junior was right."

"About Gertrude," insisted Captain Wully. "If you don't believe it, why don't you come serenadin' with us, you and Miss Heather?"

Jerry looked inquiringly at Heather.

"I'll hate myself if I do," she said.

"Then we won't go."

"But I'll hate myself worse if I don't."

He called that evening to take her to the serenade, and met her family. Mr. Higgins was very pleasant. Mrs. Higgins was very pleasant. But Jerry was uncomfortably aware of a large photograph on the mantle. The photograph was of a young man, and it was not pleasant. Its eyes followed Heather Higgins possessively. The photograph's tailored suit intimated its pockets were not lined with tax liens.

Mrs. Higgins noticed Jerry's interest. "That's Wesley Tatom."

"Of the First National Bank Tatoms," said Mrs. Higgins.

"His great grandfather was Ephraim Tatom," said Mrs. Higgins.

by H. A. HARTZELL

Ephraim Tatom, so Jerry gathered in the next half hour, had practically blazed the Oregon Trail single-handed.

"Wesley is attending the State Bankers Convention right now," said Mr. Higgins.

Mrs. Higgins gave Jerry a meaningful look. "We're *very* fond of dear, sweet Wesley," she said.

Jerry was understandably relieved when it came time to depart.

As for the serenade, Gertrude was in fine voice. Her words were incomprehensible, but no more so than foreign opera. Captain Wully puffed through *Indian Love Call* and a pibroch or two on the pipes, ably assisted by Red Skeleton on the glockenspiel and Junior on the mouth-harp.

Princess Pocahauntus was impressed by Captain Wully's full dress. She fingered the flowing shoulder plaid, tsk-tsking over the fineness of such a blanket. And the silver buckles—only a big chief would possess such wealth.

Gertrude bristled, and Oscar, the werewolf, dashed up with a limp and furry trophy, which he laid at the princess' feet.

"What's that?" Heather gasped.

"A sidehill gouger," explained Pocahauntus. "See?"

SHE put the little animal upright, or as nearly upright as circumstances permitted, for the gouger's left legs were three inches shorter than his right ones. Reaching into her reticule, she produced a couple of artistically carved bone pegs, which she fastened to the abbreviated left legs. "Prosthetics. Relics of our last gouger, who migrated to Switzerland."

"Somebody ought to write a book," mused Heather.

"Lots of books have been written," said Pocahauntus, "but not one from the 'inside.' What we spirits need is a John Gunther. Now take the subject of Lovers Leaps. More twaddle has been written about—"

"I've done a couple of regional articles for the *Covered Wagon Quarterly*, but nobody wants to print my historical fiction," said Heather. "What about Lovers Leaps?"

"Now take my own. I was really running away from a greasy warrior. He chased me to the cliff edge and, in my girlish innocence, I jumped. What price virtue!"

"Too bad *I* wasn't around," mourned Captain Wully. "I'd a-caught you."

"If I had it to do over again, I wouldn't jump." Her black eyes flashed, and she drew herself up regally. "I'd push that feather-headed Casanova off instead."

Then, graciously, she suggested barbecuing a salmon over the open fire, but Heather was afraid it would take too long and her parents might worry. So she and Jer-

ry excused themselves and left Captain Wully to his courting. As Jerry walked Heather up the front steps, the scent of lilacs was an invitation to romance, the moon a lover's promise.

"Good night," said Heather. "It's been such fun."

Her handclasp carried a hint of finality that went beyond words, and Jerry said, *"Been?"*

"Wesley gets back tomorrow."

Without being told, Jerry knew that Heather's portrait would have to be finished from memory. Any man worthy of the name, Jerry told himself, would have argued the point—unless he was broke and jobless *and* had a tax lien in his pocket.

He tried to work on her picture next morning, sought to imprison the laughter of her eyes, the song of her lips. But then he realized that the laughter was for somebody else. The song too.

From above came a few experimental notes on the glockenspiel. Presently Junior's mouth harp joined in. The melody staggered uncertainly, finally emerged as Mendelssohn's *Wedding March.*

Jerry threw down his brush and left the house. He walked toward the lighthouse. That once stately saltbox had already lost its lensed cupola and most of its siding. He watched for a long time as the Sam Schultz Salvage Company pried board from board and piled all in a stack of jackstraws. Maybe he could go to work for Sam Schultz and make enough to pay off the taxes. And, if he observed all the Horatio Alger niceties, maybe some day he'd own the company and could seek Heather Higgins' hand in marriage—only to discover she had long since married Wesley.

He walked along the beach. Climbing to a jutting promontory, he watched waves break against the rocks below. Why not throw himself into the sea? He could become a ghost, and maybe find a lady ghost, and...

HE went home and forced himself to work on Heather Higgins' portrait. He filled an entire sketch pad with brief line drawings of her until, late at night, he finally fell asleep in his chair. He awakened to broad daylight—and the whistling of the postman.

The letter was from Eloise Wright, Chairman of the Northport Art Festival, and concerned his canvases.

Ellis is positively dithyrambic! Claims you've caught a hauntingly spiritual quality, and wants to buy the storm canvas for his San Francisco galleries. Barret, the Chicago Barret, is lyrical about the spectral lights and shadows, and is

writing his New York dealer about a showing. Have sold four canvases. Enclose certified check—

Jerry reached for a chair. Four canvases? His asking price for four canvases had never come to any such figure as the check represented. The letter contained a postscript.

Barret is out of his head over "Gertrude." Impressionism at its finest, with an eerie, imaginative quality unsurpassed by any American artist. Soul of the eternally feminine, as typified by a cat with a hole in the head. Social satire in oil. Picture not priced. He asks what will you take within reason? One thousand?

Jerry was sure of only one thing. He'd never painted any picture of Gertrude. There was, however, the matter of that tube of bice green squeezed in the middle, and the gamboge left capless. He ran to the stairwell and yelled for Captain Wully, who presently appeared.

"I have here a letter—"

"I didn't do it," Captain Wully protested. "'Twas Junior touched up the paintings. And 'twas Junior painted Gertrude. Me? All I did was help Junior dry the paint and boost your prices a wee muckle."

"How much?"

"By nothing at all, you might say. A zero on the end?"

Jerry looked at the check. "I feel like I've been obtaining money under false pretenses. Junior doesn't even get any credit."

"But he does. Every one of those paintings was signed 'J. Masterson-Junior.'"

"I feel more honest about banking the check," said Jerry.

When he made out his deposit slip and totaled his bank balance, Jerry reflected how quickly an inferiority complex can melt in financial sunshine. He made a brief stop at the post office, where he mailed a check to the county assessor. He then headed straight for Heather Higgins' front door.

She had company.

"Glad to know you." Jerry acknowledged introduction to Wesley Tatom and stared with helpless fascination at the latter's necktie—of MacGreggor plaid.

"You arrived just in time to give me a little moral support," said Heather breathlessly.

"Now, Heather, we mustn't bore Masterson with our personal difficulties."

"I've started a story about Oscar the werewolf, but Wesley thinks—"

Wesley interrupted. "I'm looking at it from a business standpoint. Some day I'll step into my father's shoes at the

bank. And what would the Board of Directors think of a bank president's wife who wrote claptrap about werewolves and spare-rib glockenspiels?"

"I doubt if they'd think anything at all—particularly if it paid well," said Jerry, and stared at Wesley Tatom's tie. The knot had begun to ease gently.

"If she thinks she wants to write, why can't she stick to covered wagons, and—"

"How stuffy of you!" said Heather.

Wesley Tatom felt uncertainly of his tie, tightened the knot.

"As a matter of curiosity," Jerry addressed his rival, "what makes you so sure Heather is going to marry you?"

"It's one of those taken-for-granted matters. We've gone together since—*say*! What business is it of yours, anyway!"

Now H e a t h e r, too, was watching Wesley's necktie.

"I don't think women like to be taken for granted," Jerry said.

One end of the necktie became longer and longer as its opposite end shortened. With a final but quiet jerk, the necktie came free, hesitated for a moment opposite Wesley's belt buckle, then folded itself neatly and floated away.

Heather giggled. "Were you laughing at me?" Wesley demanded.

"Heather," said Jerry, "will you marry me?"

In the free-for-all that followed, nobody settled anything.

ALL that occurred some time ago, of course. Meanwhile, what collector hasn't heard of J. Masterson-Junior, whose canvases are lauded for their "other world" quality? And, if you have children, you probably know by heart the l i t t l e book chronicling the fortunes and misfortunes of Oscar, the w e r e w o l f who fainted at the sight of blood. And there's H a r r i e t, the hodag. And Gary, the stone-eating gyascutus. And Robert, the sidehill gouger.

Recently in print is a story of Oscar's love for Vi, the Vitiated Vampire.

Mr. and Mrs. Jerry Masterson are widely respected. She writes the books. He illustrates them in his spare time. Such a delightfully zany couple! Always joking about a Scottish sea captain who lives in the attic and is married to an Indian princess.

No wonder the Masterson children are overly imaginative—warning their playmates not to sit on Gertrude, not to step on Oscar's tail. But all kids go through a phase like that. Only a few of them are lucky enough to grow up and make money out of it—lots of highly respectable money—like the Mastersons. END

MISRULE

Glen Wheatley thanked his lucky stars for his good fortune every day of his life . . . every day, that is, but one!

by ROBERT SCOTT

THE brick smashed through the window and skittered across the top of Glen Wheatley's desk. He had already removed most of the breakables, but it caught a large plastic ash tray and sent it caroming off his cheekbone. A thin trickle of blood crept down his face.

"Good God, aren't they starting a little early this year?" Bert Hillary, who shared Wheatley's office, was obviously not expecting an answer. He had been making it clear for the past hour (they had all got to their desks an hour earlier for this day) that he was an old hand, while this was Glen's first experience of People's Day.

Glen knew that Hillary had been in the Civil Service only five or six years. He himself could hardly be accused of being an expert on the every-four-years Day. Still, he waited for the older man to make the first move.

Hillary got up and peered cautiously out the shattered window. "Yeah, they're already boiling around the outer wall like yeast in a vat. That guy with the brick must have quite a pitching arm." Sweat stood out on his forehead. He was clearly much more frightened than he pretended to be.

Glen noticed this with some satisfaction. At least, he wasn't the only one. "Come on, Wheatley. Us lower-level

boys have got to be on the hop. You'd be surprised how fast that mob can get up here."

Glen unfolded the map of Government House that had been placed on his desk that morning. He stared grimly at it, dabbing at his cheek with a rather grubby handkerchief meanwhile. The bleeding did not show any signs of stopping.

Hillary hurried to the door. "Come on!" He was openly nervous now. "It's no good studying that map for safety-holes now. You should have been doing that ever since we got here this morning."

As a matter of fact, Glen had been doing just that, whenever Hillary's flow of words had momentarily run dry. But he had not yet got the location of all the nearby hidden cubbies clearly in his mind. "Government House is such a maze," he said defensively.

"And we're damned lucky it is," Hillary said from the doorway. "Anyway, how do you know that map you've got there isn't just what they've been hawking in People's Square all this past week?" He gave a slightly sick leer.

"You know those maps are inaccurate. They're just a sop, just to give the mob an extra thrill. Government House plants most of them." He could sound like an old hand, too, Glen thought with a certain smugness.

"Nuts to that. Some of them are amazingly accurate. There are a hell of a lot of non-Government people in here from year to year, and some of them aren't here just on business. Let's get going." Hillary pulled Glen through the door, and then locked it. Glen raised his eyebrows at this. "Oh, sure," his co-worker said wryly. "Gives the People something to work off steam on." He patted the flimsy door. "This will cave in under a few hard shoulders. Not like the safety-hole panels. We hope."

"But they don't unlock for another half hour in this area."

"Thirty-eight minutes, to be exact," Hillary said, glancing at his watch. "And of course the ones deeper in and higher up open even later. We're supposed to give them a run for their taxes."

THE corridor was emptying out rapidly. Glen could hear smashing noises from the ground floor.

Apparently the People were already in the building, beginning their day of destruction. He thought gratefully of his private apartment, tucked away in the impregnable heart of Government House. Of course, it was closed off to him too on this day; but at least it was safe from the mob. They would get mainly the chaff to destroy.

"I'm heading for the upper

levels," Hillary said. "Even if the safeties open later up there, it takes longer for the mob to penetrate. There's enough breakable and burnable stuff at the first few levels to keep them busy for a while. Coming?"

Glen had just seen Joan Bourne emerge from her office and lock the door. He headed toward her. "I'm going to stay near some out-of-the-way safety in this area and hop in when it first opens. I don't feel like running from the People," he called back with a bravado he did not really feel.

"Suit yourself." Hillary was already at the stairs. He paused for a moment. "And good luck."

"Thanks," Glen said. "Good hiding."

Joan had been listening, and met him in the middle of the corridor. "I think you've got the right idea, Glen. Want some company?"

He smiled, and brushed her cheek with his lips. "You know the answer to that, Joan. For life."

"This is *hardly* the day to bring that up again." She took his arm, and they turned off down a side corridor. "Besides, I thought our relationship was very nice as it is," she pouted.

"It is. I'm just greedy."

The side passageway took them deeper into the labyrinth that was Government House. Glen had hardly ever been out of it. He had been born and brought up in the great central area that surrounded Government Park, now sealed off from both the People and the Civil Servants. Apart from a vacation trip to another city's Government House, this had been Glen's entire world. And two years ago he had passed the Examinations and become a full-fledged CS, with all the privileges—and perils, he was now realizing—that that entailed.

They turned into another corridor, went past a bank of elevators—turned off for the day, as all the elevators were in the official section of the building—and went up a long flight of stairs.

Glen stopped at the third level.

"This looks like as good a spot as any to wait for the first safety-holes to open. It's out of the way. And there's a hole right here, according to the map. It'll be opening in twenty minutes. The mob should be busy down there for longer than that." They located the almost invisible key square, and Glen pressed his Class-6 key to it. "Just on the chance they might have given us a break," he said half apologetically.

"Apparently they haven't," Joan murmured. "Let's see if my Class-5 has any better luck." She pressed her own key to the square, but the panel still refused to slide back. Class-5 shelters in this area

were often combined with those for Class 6.

GLEN looked at her quizzically. "Joan, we graduated at the same time, and you're already Class-5—Job Consultation—while I'm still Class-6—Secondary School Allocation. How do you do it?"

"Brains, personality and talent. Hadn't you noticed?" She pressed close to him.

He kissed her. "Mmm, yes. But I still don't see...."

"Darling," she said, "Joan Bourne is a young lady destined to go far. And fast."

"You seem so different from the other girls here though, Joan." He blushed. "You didn't happen to come from... Outside. Er...from the People, that is?"

"I grew up in Block 6, Section A, overlooking the statue of Martyr Sherman Adams in Government Park. Just two blocks down from you, if I remember your records correctly."

"You've had access to my records?"

"Class-5 always does to Class-6's. And I took a special interest in you, my dear." She stroked his cheek.

"Then you're forgiven the snooping," Glen smiled. "But to think I was being so polite and discreet about asking your origins!"

"Not many take the Exams and come to Civil Service from Outside any more, sweet. Just as not many from here decide to go out and try their luck in the big world. Generally we stay on our side of the fence, and they stay on theirs. Except for the Day, of course. And then it's all one-way traffic."

"But I've heard some CS people go Outside for their vacation. I never have, of course, but..."

"Oh, yes, quite a few do. You're taken in a CS plane to another Government House, where you won't be known in the city outside. You are given appropriate papers and emerge from the House during business hours. You mingle with the People, just like one of them. And when vacation's over, back to the House for Job Consultation or Welfare Benefits or whatever you want to trump up. Show your true papers, and you're whisked back to your own cozy womb." She smiled reminiscently. "Outside is an interesting experience."

This annoyed Glen obscurely. He put his arm around her. "I don't want you going Outside again. At least, not without me."

"Oh, the People are just people. Except for today..."

"WELL, well, the Bourne from which no traveler returneth! Hope I'm not interrupting anything, my dear. Anything important, that is." At this unexpected voice, Glen let go of Joan and spun

to face the intruder. It was a Class-2 High Official named Duckpath, whom he had heard speak at a few Government banquets. He dropped his fists, which he had unconsciously raised.

"Mustn't be so nervous, young man," Duckpath said, swaying slightly. He was obviously quite drunk. "How are you, Joanie?" He patted her rump affectionately and gave her a smacking kiss. Joan looked both annoyed and amused. Glen flushed, but said nothing.

After a moment of contemplating the new arrival, Joan said, "Well, Ducks, what brings you down to the lower echelons?"

"Oh, pleasure, pleasure, my dear. Wanted to see all the fun and games. Usually pretty dull on top, you know." He winked at her, then cocked an ear. "Sounds like the rabble are getting warmer, too."

Glen listened, and realized he had been hearing all along a dim muttering which was now clearly getting louder. A distinct crash sounded, and he was sure he smelled smoke.

"Come on, Joan," he said, tugging at her arm. "Let's get into the shelter. It must be time now."

"Young man, you *are* obstreperous, aren't you?" Duckpath interposed himself between Glen and Joan. "Be calm, be calm. As you may know, my key will open any of the lower echelon's shelters, and at any time. Yours is not due to open for five minutes yet, for example, but at the touch of this—" he flashed his Class-2 key— "all barriers will fall before us. And I like the scent of danger. Just the scent, of course. Now—" he motioned to Glen— "if you will just stand by that stairway, you will be able to see them in plenty of time for us all to get into shelter. You two shall be my guests. It will be very cozy." He giggled.

Glen scowled, but did as he was told.

It was true that the stairs were the obvious place for the onslaught. They led both up and down. He assumed Duckpath had come down them, but of course the People were still below, although apparently working their way rapidly to the stairs. The only other way up to this area was through one of the secret passageways, which the mob would not know about.

Another crash echoed up the stairwell, much louder this time. A wisp of smoke curled lazily in the air in front of him.

Glen fingered the caked blood on his cheek. Things he had never questioned before seemed utterly meaningless and cruel now. His irritation with Duckpath bubbled over, and he said sourly, "What madness! This whole procedure is incredibly stupid and wasteful."

Joan glanced at Duckpath

with raised eyebrows, but said nothing. That gentleman at first stiffened, then relaxed and said blandly, "I wouldn't criticize the Government too much, my boy. It gives us all we have. And it can take it away also." He smiled. "This is not madness, but sheer sanity. You must have been neglecting your Political Science courses."

"Sanity! It's murder and destruction," Glen muttered.

"You know very well, young man, that all that is being destroyed is easily replaced. *Will* be replaced tomorrow, in fact. Ours is an opulent, productive society." Duckpath's smile deepened into a smirk. "All the important documents, all the valuables, are safely locked away in the central section. And the good that is being done today!" He became rapturous. "The People are led by us, led by the nose. We decide where they will go to school, where they will live, which job they will get, how many children they may have. Soon we will decide when they are to die. We have the power." His eyes glistened.

"And in return we give them security. The population is balanced, the country productive, the old cared for; there is medical service for all. Everything is arranged for the best by the great complex of Government Houses all over the world. Everything is in the hands of the Government." Duckpath was panting slightly. "Everything is in *our* hands."

"IF everything is so perfect, why this?" Glen gestured toward the cloud of smoke seeping through the entrance to the stairway.

"It's only the office furnishings. The building itself won't burn," Joan murmured.

Duckpath gave her a little squeeze. "Our callow young friend is talking about the hatred, I believe, Joanie. The urge of the People to destroy and kill. Well, it is only natural." He belched softly. "These People are aware that their lives are woven from threads held in Government House. And though they are well cared for, they resent it. They resent having to file into this building and be allocated to this and that. They want someone to take care of them, but they resent their loss of freedom. They resent our power.

"So this is their day. It comes once every four years. The day that gives them the illusion that they have some control over us, the day of Mob Rule. This is the day they can express all their locked-up frustrations, all their fury at the State which feeds and clothes them and watches over them. They can batter down and smash and burn." Duckpath stared at Glen and seemed to sober a little. "Yes, they can even kill. They cannot bring guns

or knives here, but they can use fire and fists and stones. And that is even better for boiling away their hostilities. The hotheads among the People will go so far as to kill, and that will cool them. But they will get only the fumble-fingered and feeble-witted. The rest will take care of themselves." He paused for a moment, breathless. "Do you realize we haven't had even the sniff of a revolution in four hundred years? No civil strife at all. No *change* of any kind." He laughed. "This is Sheep's Day...their day to be wolves."

"Glen, you'd better watch the stairs," Joan said, her face taut.

Glen started. Duckpath's harangue had distracted him, and somehow chilled him too. He peered down the stairwell. There were People at the end of the lower corridor, milling around and shouting.

"We've got to get to shelter," he said, hurrying toward Joan.

Duckpath began to talk again. "This is nothing new. The Romans had a word for it, and a day for it, too. A day when the laws were abandoned and society was turned upside down. A day when the people cast off the bonds of civilization and order. A day of Misrule. They even had a King of Misrule. I rather like that. I might be such a King." He struck a pose. "King of Misrule!" He turned with a grand gesture to Joan. "And you are my..."

A rock crashed against the side of his head. Another exploded on the wall next to Glen.

"The secret passageways, Glen!" Joan screamed. "They've come up the other way. The maps must have been accurate this time."

There was a knot of men at the far bend of the corridor. They carried torches, and clumps of stones in sacks at their waists. Obviously they were not the dilettantes of People's Day. They were after more than the crash of furniture.

"Get the dame, boys!" one of them yelled. They charged forward. Duckpath was lying across the entrance to the shelter, and the mob was almost on him.

"We've got to take the stairway, Joan!" Glen cried, fumbling at her arm.

"His key, his key!" She knelt beside Duckpath and pulled the key out of his hand. The High Official stirred, but did not speak. An amazing amount of blood had already accumulated on the floor around him.

A brick grazed Glen's shoulder, sending him spinning toward the stairway. Joan rushed after him, and they pounded the stairs together. "I can get in anywhere with this," she gasped, holding up the key.

Presumably the half-conscious Duckpath had made the oncoming men pause. Ripping sounds could be heard, and a horrible strangled cry. They were relieving the High Official of his personal belongings—and probably of his life.

But the People from the floor below were now surging up the stairs, joined by four men from the crowd that had first seen Joan. "Get the d a m e! Government meat!" The cry came booming up to Glen and Joan.

They stumbled into the corridor at the next landing, realizing they would never make it up the next flight before the mob reached them. They were both fumbling with their maps. "There's a small Class-3 right around here," Joan waved her map in his face. She raced along the wall for a few yards and then clapped Duckpath's key to it. A panel slid back and she slipped inside. "Thank God!" She glanced around her. "Darling, it's only a single. Too bad."

There was obviously no room for another person, Glen saw with dismay. Joan and the air-freshening apparatus took up all the space.

"Hurry and find another, sweets." She pitched him the Class-2 key, and blew him a kiss as the door slid shut. It would open again only after sundown, when People's Day was officially over.

A mass of screaming People burst from the stairway, and raised a great shout on seeing Glen. He dashed down the corridor, turned left, and then turned right at the next passageway. He was in a long corridor ending in a large window opening on the outside.

Glen squinted at his map through eyes that refused to focus. He suddenly realized they were streaming with tears.

There was a Class-4 shelter several paces along on the left. He rushed to it and pressed the High Official's key to the square. A dim red light glowed through the plastic of the key. Full.

He pounded on the panel. Of course it was soundproof. Of course the shelter was full of wise Civil Servants. Only the fumble-fingered and the feeble-witted, only the chaff...

The People came pouring around the corner as Glen backed toward the end of the corridor. A stone sang past him and smashed through the window. Another caught him in the ribs. He backed faster, now completely blinded by tears. The growl of hatred from the mob grew louder. A heavy blow struck his collarbone and he lurched backward. His knees caught, and then he was flipping over. Out and down.

He sailed through the air.

The pressure of the mob was gone. There was no time to think. There was just an ex-

hilarating sense of flight, of space, of freedom.

EDITORIAL from the *Albany Evening Star:*

A MOST SUCCESSFUL PEOPLE'S DAY

People's Day is over again. For four more years peace and order reign over the land.

We feel that this year's Day was one of the most successful in history. The damage seemed to be substantially less than usual. Among those no longer with us are:

Oliver Duckpath: Class-2 High Official
Deeply valued, he will be missed, as those whom he cared for in his work as Supervisor will testify.
Lizabeth Brennan: Class-6 Religion Consultant
Glen Wheatley: Class-6 Secondary School Allocator
Thurmond Christian: Class-6... **END**

As a convenience, the Editors of IF provide this nomination blank for you to express your views on the forthcoming annual "Hugo" awards. Just detach and mail. Plain paper may be used if desired.

1962 HUGO AWARDS NOMINATION BLANK

20th World Science Fiction Convention ● P. O. Box 4864 ● Chicago 80, Illinois. Please enter my nominations in the following categories. I feel this is the best science fiction *published during* 1961 and should be considered for recognition at the Annual Hugo Awards Banquet on September 2.

1. Novel _____
2. Short Fiction _____
3. Dramatic Presentation _____
4. Professional Artist _____
5. Professional Magazine _____
6. Amateur Magazine _____

To become a valid nomination, this blank must be signed with name and address and postmarked by midnight April 20. Only Convention members will receive a voting ballot, distributed June 5 with the 4th issue of the Progress Report; a $2.00 membership fee, payable to George W. Price, Treasurer, will insure your vote and enter your subscription for the Progress Reports.

Name _____

Address _____

City _____ Zone _____ State _____

I already hold convention membership #
CHICON III ● Pick-Congress Hotel ● Chicago ● August 31 - Sept. 3

...AND BESIDES THOSE BOMBS...

WE entered World War I with a number of active cavalry detachments. We entered World War II with a great many spruce-sparred, fabric-covered biplanes. In each case there were old-line specialists who fought like the devil to keep what was demonstrably obsolete, old-line officers, who persisted in fighting the last war this time with the last war's methods. Because it all happened in our time, it is difficult to get detached enough to realize that a modern war stimulates not only production, but invention and design. In eighteen months this country built more ships and planes than it would have, in normal times, in half a century; and that further, the B-29 (of which we built thousands) was a design-century ahead of the old Keystone bombers, of which we had some dozens in 1939.

You'd think that by now we'd realize that a new war, or even a sharp intensification of the cold war, will bring about even more drastic developments. Technological advances don't occur arithmetically, in a straight slant like a cellar door; they occur geometrically, in a curve like a ski-jump slope or Mr. Robert Hope's famous nose. At this writing the general public seems to have a sort of numb idea that a new war would be something like the last, with something or other called fallout added, and no conception at all of the fact that a 100 megaton H-bomb has the power of five *thousand* of the eggs we laid on Hiroshima

and Nagasaki. Most importantly, there's so much talk about the Big Bombs that we seem to have lost sight completely of the array of totally novel weapons which are *certain* to emerge, just as the bazooka and the P-40 and the H-bomb itself emerged last time.

Let's take a look at some of them—devices now in actual existence, or under developmental contract, or in other ways a-borning.

THE LASER is a light-intensifier. Coupled with radar and a simple computing circuit, it can get off a flash, in a split second, which will put a hole in a tank as big as your head at 500 yards. Since this is a beam, not a missile of any kind, it travels at the speed of light and needs no corrections for windage or trajectory, and does not have to "lead" a moving target. Its developers claim that even in its present primitive stage it can move a satellite 1000 miles out slightly off orbit.

THE ATOMIC PISTOL, using slugs of californium, a rare radioactive metal which has a chain-reaction-supporting critical mass of not much more than a .50-caliber bullet. It will hit with the force of 10 tons of TNT.

RADAR "DEATH RAYS." Present-day high-intensity radars are carefully fenced and guarded lest they "fry" unwary bystanders. The effect is probably adaptable to weaponry.

GASES. Aside from the many and varied specialized gases we wish we could forget about but which are already in the tanks, a "Miltown" gas has been suggested and probably has been formulated—something which can send out more clouds of tranquilizer than an election campaign.

ION BEAMS, and high-flux focused beams of particles other than ions—these too are in the "death-ray" department. The ion beam is a leading contender for outer-space propulsion, which does not disqualify it one bit from being a lethal ray.

BIOLOGICAL WEAPONS, PRIMARY. Twenty or more diseases, some in intensified natural form, some mutated.

BIOLOGICAL WEAPONS, SECONDARY. The so-called hormone "poisons," which can inhibit or de-control growth patterns in cereal and other plants, so that they fail to mature, or come to seed, or perhaps die off. There is now a new possibility that the same sort of thing can be done by viruses.

Along with these, there are plans afoot involving not so

much new weapons, but new uses for the weapons we have.

For example, it is theorized that in certain areas of the earth's crust where known geological faults exist, a resonance might be set up by carefully calculated and timed impacts and, just as marching men can cause a bridge to collapse, these impulses might cause the fault to slip and generate an earthquake.

Then there's the tactic of the Disguised War, where prevailing winds could be made to carry some debilitating but not deadly disease—mononucleosis, for example, which just makes you weak as a duck—for a year or two until you just had no resistance (of any kind) any more.

SOME theoreticians have suggested non-radioactive dust bombs which might well sharply raise or lower the atmospheric temperature. This could raise, havoc with Russia (and Canada incidentally) without bothering us too much. Russia, on the other hand, could without compunction explode enough clean bombs in enough of the right places in the oceans, and so load the troposphere with ice crystals that the Pole would warm up and the melting ice would flood our coastal cities. Russia hasn't got any coastal cities—not, that is, to compare with ours.

Well...there are more we could mention here, and certainly more too classified to have leaked through to us, and still more which carry the "Burn Before Reading" stamp and are unknown to all but a few in the upper inner circle, and again more which, as always happens, would leap into being during a war or near-war.

Reading down the list makes one wonder why no one seems to be pushing very hard for a strong program of meticulously performed, mutually inspected, gradual disarmament. Perhaps the illiterate populations are too ignorant, and the literate ones too apathetic, to make themselves heard.

Or perhaps that solution is just too science-fiction-y for them! **END**

★ ★ ★ ★ ★

He was a mighty hunter.

Trouble was, he was on the side of the beasts!

DEADLY GAME

by EDWARD WELLEN

DEEP in the dusk of the wood Jess Seely saw the beast's pupils shine.

He had been careful of every footfall and of every shift of his shotgun as he made his way through the forest. But they had got wind of him, they had been on his trail from the instant he stepped into the wood, they were all around him now. The eyes vanished, but he could hear soft scurryings.

Move quietly and keep your eyes open; that was the first lesson he had learned and the best. He moved still deeper into the wood, years of woodcraft in every move. The years had slowed him. But the experience gained in those same years had made every move tell. He heard soft scurryings. They were stalking him. How would they try to get him this time?

He let the shotgun dangle carelessly so the barrels threatened himself.

Would that tempt one of them—a squirrel?—to leap from a limb, aiming to strike at the trigger and set off the shot? No, he saw it now. They had something else in wait just ahead. A deadfall.

Only at the last fraction of a second did his sweep of eye take in the one bit of beaver track they had failed to brush away.

He walked slowly on, straining for sign of trip wire. It would be a length of vine; he should spot it by its dying

color. He should, but he did not. He frowned. Was he guessing wrong? Then he spotted it—a length of living vine, one end still rooted, the other wrapping the trunk of a great spruce in a neat knot. The spruce itself seemed untouched, at first sight. They had plastered the gnawings back in place, but to his eyes —now that he knew what he was looking for—there stood out enough difference between the living wood and the dead to show the big bite they had taken out of the base of the tree. He admired their sense of balance. His lightest brush against the vine would bring the tree crashing down on him.

To raise—then dash—their hopes, he tried to keep from letting on he had seen the setup and went on without breaking stride—then he lengthened and lifted his step at the last to miss triggering the trip wire by a hair. A silence, then a small chatter of disappointment.

He kept on. Under the talking foliage of quaking aspen he made out other sounds. Soft scurryings. What would they have waiting ahead? A n o o s e? No, poison-tipped thorns.

THE rustle of leaves gave warning. He whirled aside. One of them—a raccoon?—loosed a bent branch of hawthorn. The branch whipped at him and the wicked spikes barely missed his flesh. The branch was still trembling when he raised his shotgun but the raccoon—he felt sure it was a raccoon and smiled, remembering the first of them, Bandido—had vanished. Yet he had to make the futile gesture so those watching would not know the gun bore no load. He eyed the wicked spikes and again smiled. On each tip a sticky smear held a thick powdering. The powder would be dried leaves of foxglove. Or had they found something better? He smiled again at more chatter of frustration.

But he sharpened his senses as he pushed on. He stopped where the going grew suddenly easy. They had cleared a path; it invited him to bypass a tangle of underbrush. He looked to see that the overarching boughs did not hold loops of vine ready to drop, and took the path. Nothing. But there had to be something. He pushed on, then slowed, smelling dampness that was not the dankness of mold.

Ahead, the trail widened into a clearing. In the center of the clearing lay a patch of spongy ground that could be lethal quagmire. Yet the tracks of a big woodchuck led straight across the patch, promising the ground would hold. Something about the tracks gave Jess Seely pause. They had a dainty, yet dragging, look.

He read faint tracks on either side of the patch and knew what had taken place. Not one but three woodchucks had crossed the clearing together, abreast, almost in step. Two had kept to the solid ground on either side of the bog, each holding in its jaws one end of a fallen tree limb. The big woodchuck in the middle had ridden with the bulk of his weight on that support, making footprints without sinking into the mire.

Jess Seely smiled and skirted the patch.

He wondered vaguely why the chatter he heard now seemed to be chatter not of frustration but of expectation. He had no time for more than vague wonder at that, and at the sudden hush. The ground —not ground but a covering of dirt over a wickerwork of branches—gave under him. His hands flung up, the gun shot out of his grip. He fell.

HIS coming to was an in-and-out thing, pulsing awareness, intermitting dream.

The pit was deep. They were good at digging. They had patience. He nodded, and blacked out.

He came to again. He lay crumpled, a leg bent strangely under him. He was helpless, but they would not come right away. They would not trust him, they would wait to make sure he was not playing helpless. Then they would come. They had patience.

He tightened himself against the pain. This was what he had worked toward, and in any case it would have been useless to have regrets. He had no regrets. He had been a good game warden. He lapsed into unconsciousness again, smiling.

The wait was long and he knew he had passed through a spell of delirium. There was a timeless moment when it seemed to him he came aware in the past, reliving the start of it. That had been the time when, feeling a gnawing helplessness, seeing the day coming when he would no longer be there to save them from his fellow man, he caught that poacher. The poacher was too busy to sense his approach, busy cursing some animal that had once again sprung the trap and made off with the bait.

He knew, in that long-ago day, that it would be wasting time to haul the man into court. The local justice of the peace would let him off with a mild rebuke. So Jess Seely booted the man out of the wood, baited and reset the trap and lay in wait.

At last a large raccoon nosed into view, picked up a piece of twig in a forepaw and reached cautiously to stick it into the trap. The trap snapped shut its grin on nothing. The raccoon was about to make off with the bait when Jess Seely remembered to

move. He aimed his hypodermic gun and shot the raccoon to sleep. He carried the raccoon home—and that was the start of Jess Seely's private, unauthorized and top-secret psychological testing laboratory.

The raccoon made an auspicious first subject, quickly mastering all sorts of release mechanisms to escape from puzzle boxes and to win rewards, learning to fit pegs into holes and to tie knots. The one stupidity was Jess Seely's. He had grown fond of the raccoon—Bandido—and he had let Bandido sense that. It was lucky Jess Seely had realized that at this early stage, or the whole thing would have gone for nothing. He had to break Bandido of his liking. He forced himself to set about coldly instilling in Bandido hate and fear of man—any man.

Only when he felt sure he had brought that about did he free Bandido. He tagged Bandido and released him into the wild, then hunted other promising subjects. There was only one Bandido. Jess Seely did not give any of the others a name.

He did not dare.

He rigged more and more sophisticated release mechanisms, and in time was graduating animals that were able to disarm any trap safely and, before making off with the bait, move the trap, reset it and conceal it so the original setter of the trap would step into it. Other than a shot from a trapper who thought the resetting was his doing, Jess Seely had little trouble with poachers after that.

AT mating seasons he used his capture-gun again to bring together the brightest of his subjects. And in thirty years, thanks to training and selective breeding, the wildlife under his protection had learned to deal with all traps, set out sentries, string alarm wires across trails, toss stones to mislead hunters and put hounds out of action and, with earth or urine, fight fire.

Now he was clear in his mind and he felt a humble pride. He had set out to teach them to guard their preserve, to save themselves. He had done a good job of this. He had taught them well. He heard them coming closer to the rim of the pit. Now he saw their eyes.

He fixed on one face. Old Bandido! But that couldn't be. Old Bandido was long dead. This was a son or a grandson or a great-grandson. In a sense they were all children of Jess Seely.

No matter. They would have no pity on him. He had taught them well indeed, he thought smiling.

END

THE HOPLITE

They were the mightiest warriors the universe had ever known. All they lacked was — something to live for!

By Richard  **Sheridan**

JORD awoke to the purr of the ventilators billowing the heavy curtains at the doorway. Through them, from the corridor, seeped the cold, realistic, shadowless light that seemed to sap the color from man and matter and leave only drabness and emptiness.

His eyes were sandy with sleep. He blinked. The optic nerves readied for sight, pupils focused, retina recorded. The primordial fear of unfamiliar things disappeared as he recognized the objects in the room, identified waking as a natural phenomenon and remembered the day's objectives.

He lay quietly on the pallet; dimly conscious of identity, clinging physically to the temporal death vanishing behind his opened eyes. Pale light, swollen bladder, sticky throat, quiescent body, unimportant hunger, dim fear of incipient living.

He felt for the cigarettes on the floor beside his bed. His careful, sleepy fingers passed lightly over the ashy ashtray and fell on wrinkled cellophane. Dry tubes from a synthetic Virginia. He shook a cigarette from the pack and lay with it jutting from his lips. The steady, filtered, odorless breeze centered on his senseless frontal lobes and whispered down his silver cheeks.

A light. His hand crawled, finger walking across the

crimson carpet to the grouping, found the metal tube and flew back to his chest. He fumbled with the trigger. His muscles were lethargic and he pressed it hard with a childish impatience.

Perseverance.

Now the metal tip glowed orange as the radioactive motes in the tube destroyed themselves with rigid self-control. Careful suction, then, and a cubic foot of tobacco smoke howled down his esophagus into his lungs, examined each feathery cranny and left by muscular contraction.

It tasted bad, but he'd expected that it would.

He didn't have to smoke all of it. The habit decently required only that he take a puff, leave it smolder, take another, allow himself to be scorched and futilely try to set the bed afire.

He watched the smoke being plucked from the air by the purifiers to be expelled with other smokes, smells and gases into an atmosphere that consisted of little else.

HIS last night's pleasure stirred, vainly fought the inevitable and fluttered its hands. "You awake, Soldier?"

The room glowed with a rosy light.

"Approximately."

The woman uncoiled herself and lay flat. Through the tangle of bronzed hair, one ear shone whitely. She brushed the hair from her eyes and her scarlet mouth opened in a feline yawn. The woman was pink and white; she quivered in voluptuous ecstasy and slithered on the satin with her own satiny, round and naked flesh.

"I didn't hear the alarm," she said, her voice thick with the residue of sleep. Her body pressed warm to his as she slid his cigarette from his fingers.

He shared the cigarette, thinking of the distance between the bed and the bathroom. The clock told him he had eight minutes to wait for maximum emission. His physiological chart showed a tolerance of nine and one-third hours.

Eight minutes to wait. Then he would have twenty minutes in which to shower, and fifteen to clothe himself in the shimmering, clinging opaque that, like the casing on a sausage, would cover him, leaving only his eyes, ears and mouth. These the neurologist would take care of before the mechanics fitted him into his machine for his next tour of duty.

There was a time for eating, time for a last cigarette, time for briefing and a long, long time for the Galbth II.

Time for everything but living.

Gently he kissed the woman's soft neck. "What's your name?" he asked wistfully, his attention divided between

the short gold hairs at the base of her head and the all important clock.

The woman chuckled chidingly and toyed with his hands, tracing the veins that stood rigid on their backs where the tortured nerves had forced them to the surface like a maze of pale blue pipes.

She did not answer. He could no more know her name than he could know her face behind the silver opaque—than he could know her voice behind the vocal distorter—no more than he could know anyone, or that anyone could know him.

Three times a week the Sex-Dispatcher sent him a woman. For all he knew it could be the same woman, or three different women.

"Can I tell the dispatcher that I pleased you?" The voice distorter had shifted and made her sound as though she had a cold. It was, of course, impossible. That scourge hadn't attacked the fortress in thirty years. In all probability it would never attack it again.

He nodded, grinding the cigarette into the ashtray. "It would be nice," he said, "if we could know one another."

She smiled. "Some day."

The clock gave warning, counting backwards through thirty seconds. Jord patted the woman's thigh in dismissal. "You may as well go now."

SHE slid from the bed, neither reluctant nor impatient. Her simple tunic lay on the crimson rug where she had dropped it nine hours before. "Good-by, Soldier," she said.

He was already on his way to the bathroom. If he should see her again, her voice would be different, her hair would be different. She had no scars or physical aberrance that he could recognize her by. She was healthy, intelligent and normal, and therefore selected for breeding. So was he. Ask the geneticists. He had.

In the bathroom, the clock told him to wash his face. Carefully he rubbed desensitizer on his mask, on the ten thousand artificial nerve endings that transcribed every motion of the living tissue it encased and magnified that motion a thousand times to the mightier motions of the machine.

The desensitizer entered the porous material; the mask sagged and became transparent like a cellophane sack. He lifted it from his face.

Two huge holes for eyes, a gaping rent of a mouth. He threw it with disgust into the depository. It would go back to the Neurological Division to be cleaned and repaired.

He looked into the mirror with the interest of a man who sees his face on rare occasions. The nerves stood out like splintered cracks in glass. He fingered his face

lovingly, unmindful of the agony caused by his touch, remembering the woman. He wondered in what manner her face would differ from his.

The pain made him stop thinking about it and he closed his eyes to spray a weak solution of desensitizer on the burning flesh. Almost immediately the pain was gone; but it left him with a marble mask that wouldn't come to life again until the effects of the desensitizer wore off.

He washed quickly in warm water, rubbed disinfectant on the atrophied area, rinsed it and stepped in front of the dryer. A thousand tongues of almost c o r p o r e a l warmth licked over his skin.

He had shaved and desensitized his body the night before, so it was only a matter of washing and disinfecting before he climbed into the overall casing and stepped clumsily into the sensitizing shower. The huge bag began to shrink and cloud, adhering to his body as though it were another layer of his skin.

Since the casing acted as a magnifying extension of his nervous and muscular systems, his body, within the casing, felt nothing. There was no sense of contact as he walked aross the floor and opened the bathroom door. As far as feeling went, he was without a body.

He said "hello" experimentally, to see if the distorter was still on. It wasn't. The hard flatness of his voice surprised him. The rosy light was gone also. Something peculiar to women caused the filter to slide over the coldly glowing silver. No man could cause it. No warrior was supposed to want to.

HE went through the curtains into the tube-like corridor and joined the other silver warriors on their way to the mess hall. He knew no one of them, yet knew them all. In battle, no friend of his would die, yet no one would die that he did not know. Two hundred years of war in this forgotten bit of the universe had shown the value of this. Some day, if he lived to be old, he would become a civilian. Until then the only faces he would see would be his own and those of the subnormal servers in the mess hall. He had no loyalties except to the fortress. The fortress was his past, present and future.

He nodded a greeting to his server. "How are you today, Teddy?" The voice distorter made him a gentle baritone.

The moron stared at him blankly, not understanding what was spoken, not caring. It was mentally impossible for him to care about anyone and psychologically impossible for anyone to care about him. That was why he was allowed to serve in the mess.

He set Jord's rations before

him in their plastic containers. A scientific measure of calories, proteins, vitamins, minerals and hay-like roughage.

Jord wished the idiot was able to talk, but decided against holding a one-sided conversation with him. He used to do it quite often, taking pleasure in the shifting planes of his face, until he'd become sick with longing for a complete human being. He knew no one and only his psychiatrist knew him. The fortress was to him one complete body.

The parts of that body could never be allowed to become more important than the total of those parts. It was the first thing a potential master of a Galbth II learned: The basic lesson in loneliness.

He choked down the measured kilograms of roughage, saving the concentrates until the last when he could suck out the synthetic flavoring and delude himself for a moment that he was eating food. His fare consisted of the precise amount necessary to keep him operating at maximum efficiency and maintain optimum size. A two-pound variation in his weight would require a refitting.

He smoked his last cigarette for the day and then made his way to the third section briefing room.

There were twelve warriors in his section. Except for microscopic differences in their builds, there was little, if anything, to distinguish one from the other. They had no contact with anything as personalized as officers. Each warrior was a separate unit. The centralization of authority was complete. There was only the loudspeaker to command. For a time the warriors had been allowed to designate the voice as "The General," but it was soon discovered that they felt a particular loyalty to the name. The word was dropped. To designate authority, a warrior used the word: "Authority." This word also served as his official concept of politics. With all the strength of the fortress in the warriors, this was to be desired.

Simultaneously, the speaker and the large television screen below it came to life.

THE scene showed one of the fortress's carefully tilled roughage farms being looted by a large body of the natives—the enemy that was determined to erase the last remnant of an empire that once held the entire solar system in its grasp. That meant nothing to Jord. It was the faces—the faces that were, relatively, not even faces at all. Yet there were points of similarity within the gulf of difference—and the faces. Faces without masks!

The voice called "Authority" was expressionless and precise.

"As you can see, a large and heavily armed contingent of the enemy has breached the dome of number seven surface-farm."

The scout obligingly swiveled his television optic to show the fused gap in the huge plastic dome through which the natives were hauling incendiary materials to destroy the crop. The motionless bulk of a warrior lay close beside the opening. He had been downed by artillery, while above the force-field the ever present aircraft of the natives circled watchfully. Somewhere, the ancient generators had shorted long enough for the raiders to slip through.

"A detachment has already been sent out," the voice continued. "The natives are to be forced back beyond the northern defense perimeter. Intelligence estimates eight hundred of the enemy and thirty field-pieces. The fortress depends on you. You will not fail the fortress."

On that note, the loudspeaker was silent.

"It seems to me," the warrior on Jord's right murmured as they moved towards the opening bulkhead at the far side of the room, "that we almost always fail." He wasn't contradicting, only remarking.

Jord nodded. One warrior lost today, two last week, one the week before, and more before that. He saw the leviathans, 140 tons of machinery with great gaping holes in their bodies, saw the wires and conduits, armor and all the intricacies that went into a Galbth II. He saw them steaming, stumbling, falling —respirators clogged—smothering. Their motions weakened, their limbs failed, the warriors died.

Two hundred years ago the planet had been a peaceful colony. Then with the collapse of the empire had come two hundred years of reversals, and they who had once been the overseers of harmless workers now found themselves struggling for the barest survival. Only the workers, the natives, had adapted.

He went through the bulkhead into the immenseness of the cavern where the machines stood waiting in the shadowless light.

Down the iron catwalks the silver warriors ran. Down to the mechanics, down to the surgeons with their surgeon fingers dead white beneath the operating lamps. All waiting. Waiting to fit the mechanism for a thousand eyes to the optic nerves, the amplifiers to the audio.

JORD felt the familiar horror.

When you were fitted with the conduits for optics and audios, you lost all contact with reality. You became a consciousness in nothing. His great fear at this time was of

falling. He seemed to fall for eons until the mechanics with steel hands slid him into his machine and, bit by bit, his body returned.

Fingers, hands, wrists, arms, feet, legs, shoulders, back, neck, jaw, c h e e k s, nose, eyes—

His cranial optics slid from their sockets within the blue steel skin of his head, and he looked down to the floor of the cavern, seventy feet below.

"Check motion!"

He moved in the ritual ballet. Seventy feet and 140 tons of steel and glass, copper and nickel, silver and plastic, and a man buried deep inside.

The ultimate machine. The ultimate extension of a man.

A ton of fist opened and closed, moved with effortless grace and fell to his side with enough power to crush a block of granite. His atomic muscles turned silently when he walked. His legs of flesh commanding legs of steel. He could walk two hundred miles an hour or run five times that fast. He could thread a needle with his f i n g e r s, or rip through a mountain.

"Check respirators."

"Check."

The technicians scurried from the cavern floor. The all-clear sounded and the roof slid open and a ramp grew up from the floor.

His voice echoed through the cavern, mingling with the voices of the other warriors. Joyous, thankful voices—the horror had passed and they were alive again.

On the surface it was winter. The m e t h a n e-frosted ground beneath the machines was like iron. Iron against steel feet rang in the heavy air. Wispy tendrils of steam rose from the great bodies. The respirators sucked and transformed a m m o n i a and methane. The great feet left imprints in earth and stone.

Jord exulted in the freedom of the surface, in the long vistas of unwalled space, in the curve of a far away horizon. He exulted in his machine body, so human in its parts, so more than human in its size and capabilities. The column of the neck, the steel sinews; every muscle, every ligament, every nerve of the human body had its counterpart in the machine. What man could do, the machine did. What affected man, in proportion, affected the machine.

Even to pain, the machine was complete.

He withdrew his optics and sent his telescope rising ten feet above his head, searching the gray land for the other detachment. A dozen miles away he could see the dome of the ravished farm. The little specks were scurrying to complete their destruction before the dreaded warriors should a p p e a r. They had blocked the entrance of the shallow valley in which the

farm lay with their artillery. Behind it the gunners would try to hold off the warriors and give the rest time to escape. Not that it mattered. The enemy cared little for his losses.

His telescope swiveled, found the scarp of an ancient bomb, ringed with what was probably fission produced obsidian, and rested on the bodies of the machines who had beaten his detachment to the scene and now came streaming out to join them.

The two detachments merged, hesitated as each warrior assumed his position and began the attack.

They would charge straight at the guns, so much a warrior cared for the marksmanship of former slaves—so much a warrior cared for the power of native shells.

AT eight miles the snouts of the cannons began to belch. The gunnery was high. The barrage passed harmlessly overhead.

The first strike was for him. The armor-piercing shell clanged and flattened out against his chest, staggering him back. He rallied, caught his balance, sped on. He almost pitied the limited inventiveness of the natives, whose genius ended when they drove man into the fortresses.

Another shell. A warrior whirled and stumbled. Jord crashed into him, steadied him. The explosions blended into an endless sound.

He felt a shell bounce from his shoulder, taking six optics with it and leaving the smell of scorched steel. They were too thick now to dodge, too close to bear. Earth and stone sprayed up from a sudden crater before him. He wheeled. Now they were in a range where the shells could disable an arm or leg.

An arm! A stiff-hung, motionless limb of steel.

The rush had brought them to the artillery. Their feet trampled the ancient guns. They smashed at belching muzzles with hammer fists. They had breached the defenses. The natives had fled. In minutes they would be trampling the fleeing enemy.

Then the earth erupted...

Jord had only one leg still functioning when he regained consciousness. One leg and perhaps eight of his optics. His audio was dead and there was something wrong with his respirator. He had to fight to keep down the panic.

A warrior who had been trapped inside his machine once told him what it was like inside a Galbth II when you couldn't move, or help yourself. If you but closed your eyes you imagined yourself inside a shell, and that shell inside a larger shell, and that inside a still larger shell until, after a hundred shells, you could imagine your machine, still true to

by Richard Sheridan

your form, lying helpless and twisted on the ground.

There was no way you could get out of your machine without the help of the mechanics. Even if there were it was impossible to exist on the surface. You had to lie where you fell. Or, if possible, make your way back as best you could to your lock.

He tried moving. His good leg sawed the air like a giant flail. There was some motion in his chest, but that was all. He erected all the optics he could control and found himself lying on his stomach, dismembered. About twenty yards to the right he saw the other leg of his machine lying across a warrior who seemed to have no motion at all. As far as he could see, no one had escaped. Warriors and parts of warriors were strewn all about him. He swiveled his optics in anxiety. If he were to be rescued, it must be soon. Already the air was foul and he was having trouble focusing his optics.

He wanted to get out of the machine. He never wanted anything as much as he wanted this. The smell of metal and the taste of metal strangled him. He wanted to get out. Worse than he wanted faces, worse than he wanted identity, worse than he wanted to be able to live on the surface. He could feel all the weight of the machine on his body. The vocalizer was still on and he moaned into the dirt.

He tried to raise his optics again, but the power had somehow failed. Many-faced, congealing darkness drew near. He rushed into it.

THE Genocide Squad was the first to go into the crater.

The last warrior had ceased moving. Later the salvagers would come to collect the precious metals. They drilled Jord's machine open but, luckily, by this time he was dead.

"Which one next?" he asked, clambering awkwardly from the hole in the machine's back. He was a native and, except for certain functional differences in his construction, was little distinguished from other natives. But normalcy is relative. The normalcy of a native may be radically different from that of a fortress dweller.

"We are fortunate the bomb didn't destroy more of these bodies," he said, rejoining his partner at the side of the warrior.

"What is it like, inside?" his partner asked curiously.

The Genocide Monitor stopped for a moment and appraised the vast bulk. He had long ago ceased to be either fascinated or repelled by the soft, unfunctional bodies of fortress dwellers.

"Just another human," the android said. **END**

The machine was not perfect. It could be tricked.

THE 64-SQUARE

by FRITZ LEIBER

SILENTLY, so as not to shock anyone with illusions about well dressed young women, Sandra Lea Grayling cursed the day she had persuaded the *Chicago Space Mirror* that there would be all sorts of human interest stories to be picked up at the first international grandmaster chess tournament in which an electronic computing machine was entered.

Not that there weren't enough humans around, it was the interest that was in doubt. The large hall was crammed with energetic dark-suited men of whom a disproportionately large number were bald, wore glasses, were faintly untidy and indefinably shabby,

It could make mistakes. And——it could learn!

MADHOUSE

ILLUSTRATED BY BURNS

had Slavic or Scandinavian features, and talked foreign languages.

They yakked interminably. The only ones who didn't were scurrying individuals with the eager-zombie look of officials.

Chess sets were everywhere —big ones on tables, still bigger diagram-type electric ones on walls, small peg-in sets dragged from side pockets and manipulated rapidly as part of the conversational ritual and still smaller folding sets in which the pieces were the tiny magnetized disks used for playing in free-fall.

There were signs featuring largely mysterious combinations of letters: FIDE, WBM,

USCF, USSF, USSR and UNESCO. Sandra felt fairly sure about the last three.

The many clocks, bedside table size, would have struck a familiar note except that they had little red flags and wheels sprinkled over their faces and they were all in pairs, two clocks to a case. That Siamese-twin clocks should be essential to a chess tournament struck Sandra as a particularly maddening circumstance.

HER last assignment had been to interview the pilot pair riding the first American manned circum-lunar satellite—and the five alternate pairs who hadn't made the flight. This tournament hall seemed to Sandra much further out of the world.

Overheard scraps of conversation in reasonably intelligible English were not particularly helpful. Samples:

"They say the Machine has been programmed to play nothing but pure Barcza System and Indian Defenses—and the Dragon Formation if anyone pushes the King Pawn."

"Hah! In that case..."

"The Russians have come with ten trunkfuls of prepared variations and they'll gang up on the Machine at adjournments. What can one New Jersey computer do against four Russian grandmasters?"

"I heard the Russians have been programmed—with hypnotic cramming and somnobriefing. Votbinnik had a nervous breakdown."

"Why, the Machine hasn't even a *Haupturnier* or an intercollegiate won. It'll over its head be playing."

"Yes, but maybe like Capa at San Sebastian or Morphy or Willie Angler at New York. The Russians will look like potzers."

"Have you studied the scores of the match between Moon Base and Circum-Terra?"

"Not worth the trouble. The play was feeble. Barely Expert Rating."

Sandra's chief difficulty was that she knew absolutely nothing about the game of chess—a point that she had slid over in conferring with the powers at the *Space Mirror*, but that now had begun to weigh on her. How wonderful it would be, she dreamed, to walk out this minute, find a quiet bar and get pie-eyed in an evil, ladylike way.

"Perhaps mademoiselle would welcome a drink?"

"You're durn tootin' she would!" Sandra replied in a rush, and then looked down apprehensively at the person who had read her thoughts.

It was a small sprightly elderly man who looked like a somewhat thinned down Peter Lorre—there was that same impression of the happy Slavic elf. What was left of his white hair was cut very short, making a silvery nap. His pince-nez had quite thick lenses.

But in sharp contrast to the somberly clad men around them, he was wearing a pearl-gray suit of almost exactly the same shade as Sandra's—a circumstance that created for her the illusion that they were fellow conspirators.

"Hey, wait a minute," she protested just the same. He had already taken her arm and was piloting her toward the nearest flight of low wide stairs. "How did you know I wanted a drink?"

"I could see that mademoiselle was having difficulty swallowing," he replied, keeping them moving. "Pardon me for feasting my eyes on your lovely throat."

"I didn't suppose they'd serve drinks here."

"But of course." They were already mounting the stairs. "What would chess be without coffee or schnapps?"

"Okay, lead on," Sandra said. "You're the doctor."

"Doctor?" He smiled widely. "You know, I like being called that."

"Then the name is yours as long as you want it—Doc."

MEANWHILE the happy little man had edged them into the first of a small cluster of tables, where a dark-suited jabbering trio was just rising. He snapped his fingers and hissed through his teeth. A white-aproned waiter materialized.

"For myself black coffee," he said. "For mademoiselle rhine wine and seltzer?"

"That'd go fine." Sandra leaned back. "Confidentially, Doc, I *was* having trouble swallowing...well, just about everything here."

He nodded. "You are not the first to be shocked and horrified by chess," he assured her. "It is a curse of the intellect. It is a game for lunatics—or else it creates them. But what brings a sane and beautiful young lady to this 64-square madhouse?"

Sandra briefly told him her story and her predicament. By the time they were served, Doc had absorbed the one and assessed the other.

"You have one great advantage," he told her. "You know nothing whatsoever of chess—so you will be able to write about it understandably for your readers." He swallowed half his demitasse and smacked his lips. "As for the Machine—you *do* know, I suppose, that it is not a humanoid metal robot, walking about clanking and squeaking like a late medieval knight in armor?"

"Yes, Doc, but..." Sandra found difficulty in phrasing the question.

"Wait." He lifted a finger. "I think I know what you're going to ask. You want to know why, if the Machine works at all, it doesn't work perfectly, so that it always wins and there is no contest. Right?"

Sandra grinned and nodded.

Doc's ability to interpret her mind was as comforting as the bubbly, mildly astringent mixture she was sipping.

He removed his pince-nez, massaged the bridge of his nose and replaced them.

"If you had," he said, "a billion computers all as fast as the Machine, it would take them all the time there ever will be in the universe just to play through all the possible games of chess, not to mention the time needed to classify those games into branching families of wins for White, wins for Black and draws, and the additional time required to trace out chains of key-moves leading always to wins. So the Machine can't play chess like God. What the Machine can do is examine all the likely lines of play for about eight moves ahead—that is, four moves each for White and Black—and then decide which is the best move on the basis of capturing enemy pieces, working toward checkmate, establishing a powerful central position and so on."

"THAT sounds like the way a man would play a game," Sandra observed. "Look ahead a little way and try to make a plan. You know, like getting out trumps in bridge or setting up a finesse."

"Exactly!" Doc beamed at her approvingly. "The Machine *is* like a man. A rather peculiar and not exactly pleasant man. A man who always abides by sound principles, who is utterly incapable of flights of genius, but who never makes a mistake. You see, you are finding human interest already, even in the Machine."

Sandra nodded. "Does a human chess player—a grandmaster, I mean—ever look eight moves ahead in a game?"

"Most assuredly he does! In crucial situations, say where there's a chance of winning at once by trapping the enemy king, he examines many more moves ahead than that—thirty or forty even. The Machine is probably programmed to recognize such situations and do something of the same sort, though we can't be sure from the information World Business Machines has released. But in most chess positions the possibilities are so very nearly unlimited that even a grandmaster can only look a very few moves ahead and must rely on his judgment and experience and artistry. The equivalent of those in the Machine is the directions fed into it before it plays a game."

"You mean the programming?"

"Indeed yes! The programming is the crux of the problem of the chess-playing computer. The first practical model, reported by Bernstein and Roberts of IBM in 1958 and which looked four moves

ahead, was programmed so that it had a greedy worried tendency to grab at enemy pieces and to retreat its own whenever they were attacked. It had a personality like that of a certain kind of chess-playing dub—a dull-brained woodpusher afraid to take the slightest risk of losing material—but a dub who could almost always beat an utter novice. The WBM machine here in the hall operates about a million times as fast. Don't ask me how, I'm no physicist, but it depends on the new transistors and something they call hypervelocity, which in turn depends on keeping parts of the Machine at a temperature near absolute zero. However, the result is that the Machine can see eight moves ahead and is capable of being programmed much more craftily."

"A million times as fast as the first machine, you say, Doc? And yet it only sees twice as many moves ahead?" Sandra objected.

"There is a geometrical progression involved there," he told her with a smile. "Believe me, eight moves ahead is a lot of moves when you remember that the Machine is errorlessly examining every one of thousands of variations. Flesh-and blood chess masters have lost games by blunders they could have avoided by looking only one or two moves ahead. The Machine will make no such oversights. Once again, you see, you have the human factor, in this case working for the Machine."

"Savilly, I have been looking allplace for you!"

A stocky, bull-faced man with a great bristling shock of black, gray-flecked hair had halted abruptly by their table. He bent over Doc and began to whisper explosively in a guttural foreign tongue.

SANDRA'S gaze traveled beyond the balustrade. Now that she could look down at it, the central hall seemed less confusedly crowded. In the middle, toward the far end, were five small tables spaced rather widely apart and with a chessboard and men and one of the Siamese clocks set out on each. To either side of the hall were tiers of temporary seats, about half of them occupied. There were at least as many more people still wandering about.

On the far wall was a big electric scoreboard and also, above the corresponding tables, five large dully glassy chessboards, the White squares in light gray, the Black squares in dark.

One of the five wall chessboards was considerably larger than the other four—the one above the Machine.

Sandra looked with quickening interest at the console of the Machine—a bank of keys and some half-dozen panels of rows and rows of tiny telltale lights, all dark at the moment.

A thick red velvet cord on little brass standards ran around the Machine at a distance of about ten feet. Inside the cord were only a few gray-smocked men. Two of them had just laid a black cable to the nearest chess table and were attaching it to the Siamese clock.

Sandra tried to think of a being who always checked everything, but only within limits beyond which his thoughts never ventured, and who never made a mistake...

"Miss Grayling! May I present to you Igor Jandorf."

She turned back quickly with a smile and a nod.

"I should tell you, Igor," Doc continued, "that Miss Grayling represents a large and influential Midwestern newspaper. Perhaps you have a message for her readers."

The shock-headed man's eyes flashed. "I most certainly do!" At that moment the waiter arrived with a second coffee and wine-and seltzer. Jandorf seized Doc's new demitasse, drained it, set it back on the tray with a flourish and drew himself up.

"TELL your readers, Miss Grayling," he proclaimed, fiercely arching his eyebrows at her and actually slapping his chest, "that I, Igor Jandorf, will defeat the Machine by the living force of my human personality! Already I have offered to play it an informal game blindfold—I, who have played 50 blindfold games simultaneously! Its owners refuse me. I have challenged it also to a few games of rapid-transit—an offer no true grandmaster would dare ignore. Again they refuse me. I predict that the Machine will play like a great oaf—at least against *me*. Repeat: I, Igor Jandorf, by the living force of my human personality, will defeat the Machine. Do you have that? You can remember it?"

"Oh yes," Sandra assured him, "but there are some other questions I very much want to ask you, Mr. Jandorf."

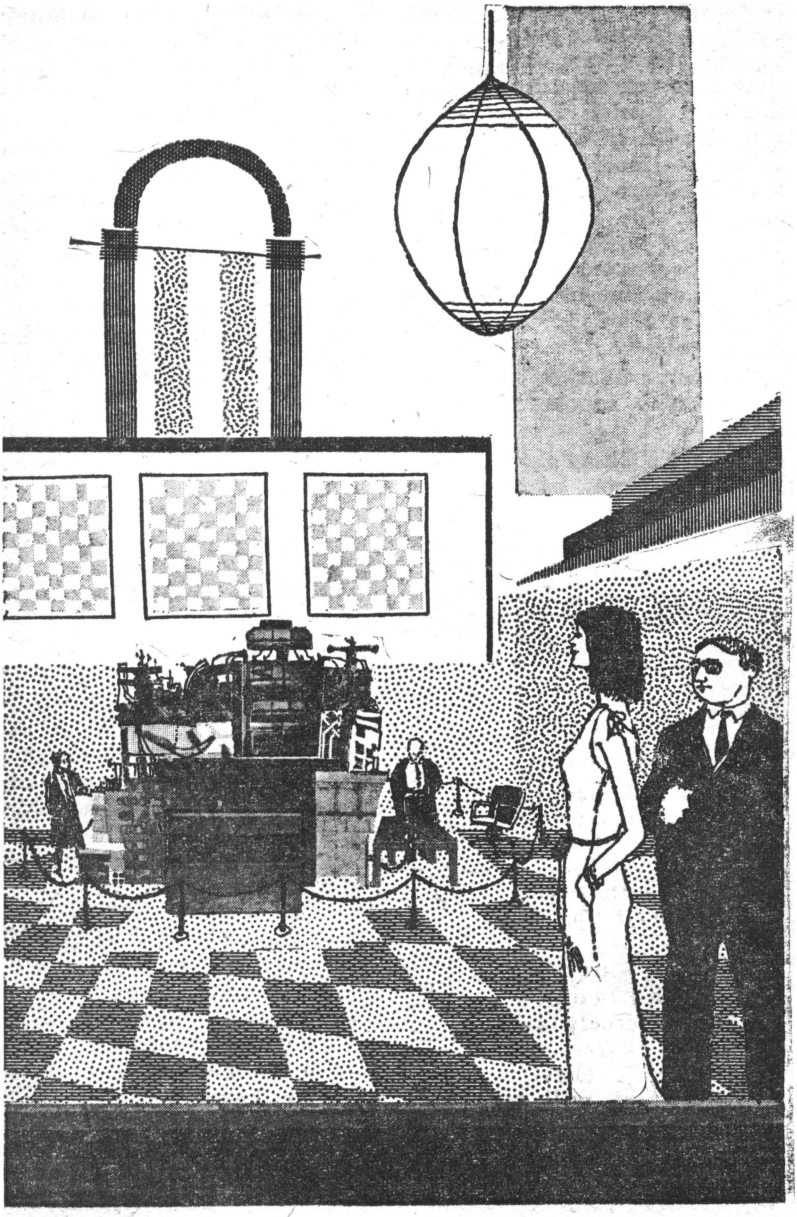
"I am sorry, Miss Grayling, but I must clear my mind now. In ten minutes they start the clocks."

While Sandra arranged for an interview with Jandorf after the day's playing session, Doc reordered his coffee.

"One expects it of Jandorf," he explained to Sandra with a philosophic shrug when the shock-headed man was gone. "At least he didn't take your wine-and-seltzer. Or did he? One tip I have for you: don't call a chess master Mister, call him Master. They all eat it up."

"Gee, Doc, I don't know how to thank you for everything. I hope I haven't offended Mis—Master Jandorf so that he doesn't—"

"Don't worry about that. Wild horses couldn't keep Jandorf away from a press interview. You know, his



rapid-transit challenge was cunning. That's a minor variety of chess where each player gets only ten seconds to make a move. Which I don't suppose would give the Machine time to look three moves ahead. Chess players would say that the Machine has a very slow sight of the board. This tournament is being played at the usual international rate of 15 moves an hour, and—"

"Is that why they've got all those crazy clocks?" Sandra interrupted.

"Oh, yes. Chess clocks measure the time each player takes in making his moves. When a player makes a move he presses a button that shuts his clock off and turns his opponent's on. If a player uses too much time, he loses as surely as if he were checkmated. Now since the Machine will almost certainly be programmed to take an equal amount of time on successive moves, a rate of 15 moves an hour means it will have 4 minutes a move—and it will need every second of them! Incidentally it was typical Jandorf bravado to make a point of a blindfold challenge—just as if the Machine weren't playing blindfold itself. Or *is* the Machine blindfold? How do you think of it?"

"Gosh, I don't know. Say, Doc, is it really true that Master Jandorf has played 50 games at once blindfolded? I can't believe that."

"OF course not!" Doc assured her. "It was only 49 and he lost two of those and drew five. Jandorf always exaggerates. It's in his blood."

"He's one of the Russians, isn't he?" Sandra asked. "Igor?"

Doc chuckled. "Not exactly," he said gently. "He is originally a Pole and now he has Argentinian citizenship. You have a program, don't you?"

Sandra started to hunt through her pocketbook, but just then two lists of names lit up on the big electric scoreboard.

THE PLAYERS
William Angler, USA
Bela Grabo, Hungary
Ivan Jal, USSR
Igor Jandorf, Argentina
Dr. S. Krakatower, France
Vassily Lysmov, USSR
The Machine, USA (programmed by Simon Great)
Maxim Serek, USSR
Moses Sherevsky, USA
Mikhail Votbinnik, USSR
Tournament Director: Dr. Jan Vanderhoef

FIRST ROUND PAIRINGS
Sherevski vs. Serek
Jal vs. Angler
Jandorf vs. Votbinnik
Lysmov vs. Krakatower
Grabo vs. Machine

"Cripes, Doc, they all sound like they were Russians," Sandra said after a bit. "Except this Willie Angler. Oh, he's

the boy wonder, isn't he?"

Doc nodded. "Not such a boy any longer, though. He's ... Well, speak of the Devil's children... Miss Grayling, I have the honor of presenting to you the only grandmaster ever to have been *ex*-chess-champion of the United States while still technically a minor—Master William Augustus Angler."

A tall, sharply-dressed young man with a hatchet face pressed the old man back into his chair.

"How are you, Savvy, old boy old boy?" he demanded. "Still chasing the girls, I see."

"Please, Willie, get off me."

"Can't take it, huh?" Angler straightened up somewhat. "Hey waiter! Where's that chocolate malt? I don't want it *next* year. About that *ex*-, though. I was swindled, Savvy. I was robbed."

"Willie!" Doc said with some asperity. "Miss Grayling is a journalist. She would like to have a statement from you as to how you will play against the Machine."

ANGLER grinned and shook his head sadly. "Poor old Machine," he said. "I don't know why they take so much trouble polishing up that pile of tin just so that I can give it a hit in the head. I got a hatful of moves it'll burn out all its tubes trying to answer. And if it gets too fresh, how about you and me giving its low-temperature section the hotfoot, Savvy? The money WBM's putting up is okay, though. That first prize will just fit the big hole in my bank account."

"I know you haven't the time now, Master Angler," Sandra said rapidly, "but if after the playing session you could grant me—"

"Sorry, babe," Angler broke in with a wave of dismissal. "I'm dated up for two months in advance. Waiter! I'm here, not there!" And he went charging off.

Doc and Sandra looked at each other and smiled.

"Chess masters aren't exactly humble people, are they?" she said.

Doc's smile became tinged with sad understanding. "You must excuse them, though," he said. "They really get so little recognition or recompense. This tournament is an exception. And it takes a great deal of ego to play greatly."

"I suppose so. So World Business Machines is responsible for this tournament?"

"Correct. Their advertising department is interested in the prestige. They want to score a point over their great rival."

"But if the Machine plays badly it will be a black eye for them," Sandra pointed out.

"True," Doc agreed thoughtfully. "WBM must feel very sure... It's the prize money they've put up, of course, that's brought the world's greatest players here. Other-

wise half of them would be holding off in the best temperamental-artist style. For chess players the prize money is fabulous—$35,000, with $15,000 for first place, and all expenses paid for all players. There's never been anything like it. Soviet Russia is the only country that has ever supported and rewarded her best chess players at all adequately. I think the Russian players are here because UNESCO and FIDE (that's *Federation Internationale des Echecs*—the international chess organization) are also backing the tournament. And perhaps because the Kremlin is hungry for a little prestige now that its space program is sagging."

"But if a Russian doesn't take first place it will be a black eye for them."

Doc frowned. "True, in a sense. *They* must feel very sure... Here they are now."

FOUR men were crossing the center of the hall, which was clearing, toward the tables at the other end. Doubtless they just happened to be going two by two in close formation, but it gave Sandra the feeling of a phalanx.

"The first two are Lysmov and Votbinnik," Doc told her. "It isn't often that you see the current champion of the world—Votbinnik—and an ex-champion arm in arm. There are two other persons in the tournament who have held that honor—Jal and Vanderhoef the director, way back."

"Will whoever wins this tournament become champion?"

"Oh no. That's decided by two-player matches—a very long business—after elimination tournaments between leading contenders. This tournament is a round robin: each player plays one game with every other player. That means nine rounds."

"Anyway there *are* an awful lot of Russians in the tournament," Sandra said, consulting her program. "Four out of ten have USSR after them. And Bela Grabo, Hungary—that's a satellite. And Sherevsky and Krakatower are Russian-sounding names."

"The proportion of Soviet to American entries in the tournament represents pretty fairly the general difference in playing strength between the two countries," Doc said judiciously. "Chess mastery moves from land to land with the years. Way back it was the Moslems and the Hindus and Persians. Then Italy and Spain. A little over a hundred years ago it was France and England. Then Germany, Austria and the New World. Now it's Russia—including of course the Russians who have run away from Russia. But don't think there aren't a lot of good Anglo-Saxon types who are masters of the first water. In fact, there are a lot of them here around us,

though perhaps you don't think so. It's just that if you play a lot of chess you get to looking Russian. Once it probably made you look Italian. Do you see that short bald-headed man?"

"You mean the one facing the Machine and talking to Jandorf?"

"Yes. Now that's one with a lot of human interest. Moses Sherevsky. Been champion of the United States many times. A very strict Orthodox Jew. Can't play chess on Fridays or on Saturdays before sundown." He chuckled. "Why, there's even a story going around that one rabbi told Sherevsky it would be unlawful for him to play against the Machine because it is technically a *gòlem*—the clay Frankenstein's monster of Hebrew legend."

Sandra asked, "What about Grabo and Kratower?"

DOC gave a short scornful laugh. "Krakatower! Don't pay any attention to *him*. A senile has-been, it's a scandal he's been allowed to play in this tournament! He must have pulled all sorts of strings. Told them that his lifelong services to chess had won him the honor and that they had to have a member of the so-called Old Guard. Maybe he even got down on his knees and cried—and all the time his eyes on that expense money and the last-place consolation prize! Yet dreaming schizophrenically of beating them all! Please, don't get me started on Dirty Old Krakatower."

"Take it easy, Doc. He sounds like he would make an interesting article. Can you point him out to me?"

"You can tell him by his long white beard with coffee stains. I don't see it anywhere, though. Perhaps he's shaved it off for the occasion. It would be like that antique womanizer to develop senile delusions of youthfulness."

"And Grabo?" Sandra pressed, suppressing a smile at the intensity of Doc's animosity.

Doc's eyes grew thoughtful. "About Bela Grabo (why are three out of four Hungarians named Bela?) I will tell you only this: That he is a very brilliant player and that the Machine is very lucky to have drawn him as its first opponent."

He would not amplify his statement. Sandra studied the scoreboard again.

"This Simon Great who's down as programming the Machine. He's a famous physicist, I suppose?"

"By no means. That was the trouble with some of the early chess-playing machines—they were programmed by scientists. No, Simon Great is a psychologist who at one time was a leading contender for the world's chess championship. I think WBM was sur-

prisingly shrewd to pick him for the programming job. Let me tell you— No, better yet—"

Doc shot to his feet, stretched an arm on high and called out sharply, "Simon!"

A man some four tables away waved back and a moment later came over.

"What is it, Savilly?" he asked. "There's hardly any time, you know."

THE newcomer was of middle height, compact of figure and feature, with graying hair cut short and combed sharply back.

Doc spoke his piece for Sandra.

Simon Great smiled thinly. "Sorry," he said, "But I am making no predictions and we are giving out no advance information on the programming of the Machine. As you know, I have had to fight the Players' Committee tooth and nail on all sorts of points about that and they have won most of them. I am not permitted to re-program the Machine at adjournments—only between games (I did insist on that and get it!) And if the Machine breaks down during a game, its clock keeps running on it. My men are permitted to make repairs—if they can work fast enough."

"That makes it very tough on you," Sandra put in. "The Machine isn't allowed any weaknesses."

Great nodded soberly. "And now I must go. They've almost finished the count-down, as one of my technicians keeps on calling it. Very pleased to have met you, Miss Grayling —I'll check with our PR man on that interview. Be seeing you, Savvy."

The tiers of seats were filled now and the central space almost clear. Officials were shooing off a few knots of lingerers. Several of the grandmasters, including all four Russians, were seated at their tables. Press and company cameras were flashing. The four smaller wallboards lit up with the pieces in the opening position—white for White and red for Black. Simon Great stepped over the red velvet cord and more flash bulbs went off.

"You know, Doc," Sandra said, "I'm a dog to suggest this, but what if this whole thing were a big fake? What if Simon Great were really playing the Machine's moves? There would surely be some way for his electricians to rig—"

Doc laughed happily—and so loudly that some people at the adjoining tables frowned.

"Miss Grayling, that is a wonderful idea! I will probably steal it for a short story. I still manage to write and place a few in England. No, I do not think that is at all likely. WBM would never risk such a fraud. Great is completely out of practice for actual tournament play, though

not for chess-thinking. The difference in style between a computer and a man would be evident to any expert. Great's own style is remembered and would be recognized—though, come to think of it, his style was often described as being machine-like..." For a moment Doc's eyes became thoughtful. Then he smiled again. "But no, the idea is impossible. Vanderhoef as Tournament Director has played two or three games with the Machine to assure himself that it operates legitimately and has grandmaster skill."

"Did the Machine beat him?" Sandra asked.

DOC shrugged. "The scores weren't released. It was very hush-hush. But about your idea, Miss Grayling—did you ever read about Maelzel's famous chessplaying automaton of the 19th Century? That one too was supposed to work by machinery (cogs and gears, not electricity) but actually it had a man hidden inside it—your Edgar Poe exposed the fraud in a famous article. In *my* story I think the chess robot will break down while it is being demonstrated to a millionaire purchaser and the young inventor will have to win its game for it to cover up and swing the deal. Only the millionaire's daughter, who is really a better player than either of them...yes, yes! Your Ambrose Bierce too wrote a story about a chessplaying robot of the clickety-clank-grr kind who murdered his creator, crushing him like an iron grizzly bear when the man won a game from him. Tell me, Miss Grayling, do you find yourself imagining this Machine putting out angry tendrils to strangle its opponents, or beaming rays of death and hypnotism at them? I can imagine..."

While Doc chattered happily on about chessplaying robots and chess stories, Sandra found herself thinking about him. A writer of some sort evidently and a terrific chess buff. Perhaps he was an actual medical doctor. She'd read something about two or three coming over with the Russian squad. But Doc certainly didn't sound like a Soviet citizen.

He was older than she'd first assumed. She could see that now that she was listening to him less and looking at him more. Tired, too. Only his dark-circled eyes shone with unquenchable youth. A useful old guy, whoever he was. An hour ago she'd been sure she was going to muff this assignment completely and now she had it laid out cold. For the umpteenth time in her career Sandra shied away from the guilty thought that she wasn't a writer at all or even a reporter, she just used dime-a-dozen female attractiveness to rope a sus-

ceptible man (young, old, American, Russian) and pick his brain...

She realized suddenly that the whole hall had become very quiet.

Doc was the only person still talking and people were again looking at them disapprovingly. All five wall-boards were lit up and the changed position of a few pieces showed that opening moves had been made on four of them, including the Machine's. The central space between the tiers of seats was completely clear now, except for one man hurrying across it in their direction with the rapid yet quiet, almost tip-toe walk that seemed to mark all the officials. *Like morticians' assistants,* she thought. He rapidly mounted the stairs and halted at the top to look around searchingly. His gaze lighted on their table, his eyebrows went up, and he made a beeline for Doc. Sandra wondered if she should warn him that he was about to be shushed.

The official laid a hand on Doc's shoulder. "Sir!" he said agitatedly. "Do you realize that they've started your clock, Dr. Krakatower?"

SANDRA became aware that Doc was grinning at her. "Yes, it's true enough, Miss Grayling," he said. "I trust you will pardon the deception, though it was hardly one, even technically. Every word I told you about Dirty Old Krakatower is literally true. Except the long white beard—he never wore a beard after he was 35—that part was an out-and-out lie! Yes, yes! I will be along in a moment! Do not worry, the spectators will get their money's worth out of me! And WBM did not with its expense account buy my soul—that belongs to the young lady here."

Doc rose, lifted her hand and kissed it. "Thank you, mademoiselle, for a charming interlude. I hope it will be repeated. Incidentally, I should say that besides... (Stop pulling at me, man!—there can't be five minutes on my clock yet!)...that besides being Dirty Old Krakatower, grandmaster emeritus, I am also the special correspondent of the *London Times.* It is always pleasant to chat with a colleague. Please do not hesitate to use in your articles any of the ideas I tossed out, if you find them worthy—I sent in my own first dispatch two hours ago. Yes, yes, I come! Au revoir, mademoiselle!"

He was at the bottom of the stairs when Sandra jumped up and hurried to the balustrade.

"Hey, Doc!" she called.

He turned.

"Good luck!" she shouted and waved.

He kissed his hand to her and went on.

People glared at her then and a horrified official came hurrying. Sandra made big

frightened eyes at him, but she couldn't quite hide her grin.

IV

SITZFLEISCH (which roughly means endurance —"sitting flesh" or "buttock meat") is the quality needed above all others by tournament chess players—and their audiences.

After Sandra had watched the games (the players' faces, rather—she had a really good pair of zoomer glasses) for a half hour or so, she had gone to her hotel room, written her first article (interview with the famous Dr. Krakatower), sent it in and then come back to the hall to see how the games had turned out.

They were still going on, all five of them.

The press section was full, but two boys and a girl of high-school age obligingly made room for Sandra on the top tier of seats and she tuned in on their whispered conversation. The jargon was recognizably related to that which she'd gotten a dose of on the floor, but gamier. Players did not sacrifice pawns, they sacked them. No one was ever defeated, only busted. Pieces weren't lost but blown. The Ruy Lopez was the Dirty Old *Roo*ay—and incidentally a certain set of opening moves named after a long-departed Spanish churchman, she now discovered from Dave, Bill and Judy, whose sympathetic help she won by frequent loans of her zoomer glasses.

The four-hour time control point—two hours and 30 moves for each player—had been passed while she was sending in her article, she learned, and they were well on their way toward the next control point—an hour more and 15 moves for each player —after which unfinished games would be adjourned and continued at a special morning session. Sherevsky had had to make 15 moves in two minutes after taking an hour earlier on just one move. But that was nothing out of the ordinary, Dave had assured her in the same breath, Sherevsky was always letting himself get into "fantastic time-pressure" and then wriggling out of it brilliantly. He was apparently headed for a win over Serek. *Score one for the USA over the USSR,* Sandra thought proudly.

Votbinnik had Jandorf practically in *Zugzwang* (his pieces all tied up, Bill explained) and the Argentinian would be busted shortly. Through the glasses Sandra could see Jandorf's thick chest rise and fall as he glared murderously at the board in front of him. By contrast Votbinnik looked like a man lost in reverie.

Dr. Krakatower had lost a pawn to Lysmov but was hanging on grimly. However, Dave would not give a

plugged nickle for his chances against the former world's champion, because "those old ones always weaken in the sixth hour."

"You for-get the bio-logical mir-acle of Doc-tor Las-ker," Bill and Judy chanted as one.

"Shut up," Dave warned them. An official glared angrily from the floor and shook a finger. Much later Sandra discovered that Dr. Emanuel Lasker was a philosopher-mathematician who, after holding the world's championship for 26 years, had won a very strong tournament (New York 1924) at the age of 56 and later almost won another (Moscow 1935) at the age of 67.

SANDRA studied Doc's face carefully through her glasses. He looked terribly tired now, almost a death's head. Something tightened in her chest and she looked away quickly.

The Angler-Jal and Grabo-Machine games were still ding-dong contests, Dave told her. If anything, Grabo had a slight advantage. The Machine was "on the move," meaning that Grabo had just made a move and was waiting the automaton's reply.

The Hungarian was about the most restless "waiter" Sandra could imagine. He twisted his long legs constantly and writhed his shoulders and about every five seconds he ran his hands back through his unkempt tassle of hair.

Once he yawned selfconsciously, straightened himself and sat very compactly. But almost immediately he was writhing again.

The Machine had its own mannerisms, if you could call them that. Its dim, unobtrusive telltale lights were winking on and off in a fairly rapid, random pattern. Sandra got the impression that from time to time Grabo's eyes were trying to follow their blinking, like a man watching fireflies.

Simon Great sat impassively behind a bare table next to the Machine, his five gray-smocked technicians grouped around him.

A flushed-faced, tall, distinguished-looking elderly gentleman was standing by the Machine's console. Dave told Sandra it was Dr. Vanderhoef, the Tournament Director, one-time champion of the world.

"Another old potzer like Krakatower, but with sense enough to know when he's licked," Bill characterized harshly.

"Youth, ah, un-van-quishable youth," Judy chanted happily by herself. "Flashing like a meteor across the chess fir-ma-ment. Morphy, Angler, Judy Kaplan..."

"Shut up! They really will throw us out," Dave warned her and then explained in whispers to Sandra that Vanderhoef and his assistants had the nervous-making job of

feeding into the Machine the moves made by its opponent, "so everyone will know it's on the level, I guess." He added, "It means the Machine loses a few seconds every move, between the time Grabo punches the clock and the time Vanderhoef gets the move fed into the Machine."

Sandra nodded. The players were making it as hard on the Machine as possible, she decided with a small rush of sympathy.

SUDDENLY there was a tiny movement of the gadget attached from the Machine to the clocks on Grabo's table and a faint *click*. But Grabo almost leapt out of his skin.

Simultaneously a red castle-topped piece (one of the Machine's rooks, Sandra was informed) moved four squares sideways on the big electric board above the Machine. An official beside Dr. Vanderhoef went over to Grabo's board and carefully moved the corresponding piece. Grabo seemed about to make some complaint, then apparently thought better of it and plunged into brooding cogitation over the board, elbows on the table, both hands holding his head and fiercely massaging his scalp.

The Machine let loose with an unusually rapid flurry of blinking. Grabo straightened up, seemed again about to make a complaint, then once more to repress the impulse. Finally he moved a piece and punched his clock. Dr. Vanderhoef immediately flipped four levers on the Machine's console and Grabo's move appeared on the electric board.

Grabo sprang up, went over to the red velvet cord and motioned agitatedly to Vanderhoef.

There was a short conference, inaudible at the distance, during which Grabo waved his arms and Vanderhoef grew more flushed. Finally the latter went over to Simon Great and said something, apparently with some hesitancy. But Great smiled obligingly, sprang to his feet, and in turn spoke to his technicians, who immediately fetched and unfolded several large screens and set them in front of the Machine, masking the blinking lights. *Blindfolding it,* Sandra found herself thinking.

Dave chuckled. "That's already happened once while you were out," he told Sandra. "I guess seeing the lights blinking makes Grabo nervous. But then *not* seeing them makes him nervous. Just watch."

"The Machine has its own mysterious pow-wow-wers," Judy chanted.

"That's what you think," Bill told her. "Did you know that Willie Angler has hired Evil Eye Bixel out of Brooklyn to put the whammy on the Machine? S'fact."

"...pow-wow-wers unknown to mere mortals of flesh and blood—"

"Shut up!" Dave hissed. "Now you've done it. Here comes old Eagle Eye. Look, I don't know you two. I'm with this lady here."

BELA Grabo was suffering acute tortures. He had a winning attack, he knew it. The Machine was counter-attacking, but unstrategically, desperately, in the style of a Frank Marshall complicating the issue and hoping for a swindle. All Grabo had to do, he knew, was keep his head and *not blunder*—not throw away a queen, say, as he had to old Vanderhoef at Brussels, or overlook a mate in two, as he had against Sherevsky at Tel Aviv. The memory of those unutterably black moments and a dozen more like them returned to haunt him. Never if he lived a thousand years would he be free of them.

For the tenth time in the last two minutes he glanced at his clock. He had fifteen minutes in which to make five moves. He wasn't in time-pressure, he must remember that. He mustn't make a move on impulse, he mustn't let his treacherous hand leap out without waiting for instructions from its guiding brain.

First prize in this tournament meant incredible wealth —transportation money and hotel bills for more than a score of future tournaments. But more than that, it was one more chance to blazon before the world his true superiority rather than the fading reputation of it. "...Bela Grabo, brilliant but erratic..." Perhaps his last chance.

When, in the name of Heaven, was the Machine going to make its next move? Surely it had already taken more than four minutes! But a glance at its clock showed him that hardly half that time had gone by. He decided he had made a mistake in asking again for the screens. It was easier to watch those damned lights blink than have them blink in his imagination.

Oh, if chess could only be played in intergalactic space, in the black privacy of one's thoughts. But there had to be the physical presence of the opponent with his (possibly deliberate) unnerving mannerisms—Lasker and his cigar, Capablanca and his red necktie, Nimzowitsch and his nervous contortions (very like Bela Grabo's, though the latter did not see it that way). And now this ghastly flashing, humming, stinking, button-banging metal monster!

Actually, he told himself, he was being asked to play two opponents, the Machine and Simon Great, a sort of consultation team. It wasn't fair!

THE Machine hammered its button and rammed its queen across the electric

board. In Grabo's imagination it was like an explosion.

Grabo held onto his nerves with an effort and plunged into a maze of calculations.

Once he came to, like a man who has been asleep, to realize that he was wondering whether the lights were still blinking behind the screens while he was making his move. Did the Machine really analyze at such times or were the lights just an empty trick? He forced his mind back to the problems of the game, decided on his move, checked the board twice for any violent move he might have missed, noted on his clock that he'd taken five minutes, checked the board again very rapidly and then put out his hand and made his move—with the fiercely suspicious air of a boss compelled to send an extremely unreliable underling on an all-important errand.

Then he punched his clock, sprang to his feet, and once more waved for Vanderhoef.

Thirty seconds later the Tournament Director, very red-faced now, was saying in a low voice, almost pleadingly, "But Bela, I cannot keep asking them to change the screens. Already they have been up twice and down once to please you. Moving them disturbs the other players and surely isn't good for your own peace of mind. Oh, Bela, my dear Bela—"

Vanderhoef broke off. Grabo knew he had been going to say something improper but from the heart, such as, "For God's sake don't blow this game out of nervousness now that you have a win in sight"—and this sympathy somehow made the Hungarian furious.

"I have other complaints which I will make formally after the game," he said harshly, quivering with rage. "It is a disgrace the way that mechanism punches the time-clock button. It will crack the case! The Machine never stops humming! And it stinks of ozone and hot metal, as if it were about to explode!"

"It *cannot* explode, Bela. Please!"

"No, but it threatens to! And you know a threat is always more effective than an actual attack! As for the screens, they must be taken down at once, I demand it!"

"Very well, Bela, very well, it will be done. Compose yourself."

Grabo did not at once return to his table—he could not have endured to sit still for the moment—but paced along the line of tables, snatching looks at the other games in progress. When he looked back at the big electric board, he saw that the Machine had made a move although he hadn't heard it punch the clock. He rushed back and studied the board without sitting down. Why, the Machine had made a *stupid* move, he saw with a

rush of exaltation. At that moment the last screen being folded started to fall over, but one of the gray-smocked men caught it deftly. Grabo flinched and his hand darted out and moved a piece.

He heard someone grasp. Vanderhoef.

IT got very quiet. The four soft clicks of the move being fed into the Machine were like the beat of a muffled drum.

There was a buzzing in Grabo's ears. He looked down at the board in horror.

The Machine blinked, blinked once more and then, although barely twenty seconds had elapsed, moved a rook.

On the glassy gray margin above the Machine's electric board, large red words flamed on:

CHECK! AND MATE IN THREE

Up in the stands Dave squeezed Sandra's arm. "He's done it! He's let himself be swindled."

"You mean the Machine has beaten Grabo?" Sandra asked.

"What else?"

"Can you be sure? Just like that?"

"Of cour... Wait a second... Yes, I'm sure."

"Mated in three like a potzer," Bill confirmed.

"The poor old boob," Judy sighed.

Down on the floor Bela Grabo sagged. The assistant director moved toward him quickly. But then the Hungarian straightened himself a little.

"I resign," he said softly.

The red words at the top of the board were wiped out and briefly replaced, in white, by:

THANK YOU FOR A GOOD GAME

And then a third statement, also in white, flashed on for a few seconds:

YOU HAD BAD LUCK

Bela Grabo clenched his fists and bit his teeth. Even *the Machine* was being sorry for him!

He stiffly walked out of the hall. It was a long, long walk.

V

ADJOURNMENT time neared. Serek, the exchange down but with considerable time on his clock, sealed his forty-sixth move against Sherevsky and handed the envelope to Vanderhoef. It would be opened when the game was resumed at the morning session. Dr. Krakatower studied the position on his board and then quietly tipped over his king. He sat there for a moment as if he hadn't the strength to rise. Then he shook himself a little, smiled, got up, clasped

hands briefly with Lysmov and wandered over to watch the Angler-Jal game.

Jandorf had resigned his game to Votbinnik some minutes ago, rather more surlily.

After a while Angler sealed a move, handing it to Vanderhoef with a grin just as the little red flag dropped on his clock, indicating he'd used every second of his time.

Up in the stands Sandra worked her shoulders to get a kink out of her back. She'd noticed several newsmen hurrying off to report in the Machine's first win. She was thankful that her job was limited to special articles.

"Chess is a pretty intense game," she remarked to Dave.

He nodded. "It's a killer. I don't expect to live beyond forty myself."

"Thirty," Bill said.

"Twenty-five is enough time to be a meteor," said Judy.

Sandra thought to herself: *the Unbeat Generation.*

NEXT day Sherevsky played the Machine to a dead-level ending. Simon Great offered a draw for the Machine (over an unsuccessful interfering protest from Jandorf that this constituted making a move for the Machine) but Sherevsky refused and sealed his move.

"He wants to have it proved to him that the Machine can play end games," Dave commented to Sandra up in the stands. "I don't blame him."

At the beginning of today's session Sandra had noticed that Bill and Judy were following each game in a very new-looking book they shared jealously between them. *Won't look new for long,* Sandra had thought.

"That's the 'Bible' they got there," Dave had explained. "MCO— *Modern Chess Openings.* It lists all the best opening moves in chess, thousands and thousands of variations. That is, what masters *think* are the best moves. The moves that have won in the past, really. We chipped in together to buy the latest edition—the 13th—just hot off the press," he had finished proudly.

Now with the Machine-Sherevsky ending the center of interest, the kids were consulting another book, one with grimy, dog-eared pages.

"That's the 'New Testament'— *Basic Chess Endings,*" Dave said when he noticed her looking. "There's so much you must know in endings that it's amazing the Machine can play them at all. I guess as the pieces get fewer it starts to look deeper."

SANDRA nodded. She was feeling virtuous. She had got her interview with Jandorf and then this morning one with Grabo ("How it Feels to Have a Machine Out-Think You"). The latter had made her think of herself as a real vulture of the press, cir-

cling over the doomed. The Hungarian had seemed in a positively suicidal depression.

One newspaper article made much of the Machine's "psychological tactics," hinting that the blinking lights were designed to hypnotize opponents. The general press coverage was somewhat startling. A game that in America normally rated only a fine-print column in the back sections of a very few Sunday papers was now getting boxes on the front page. The defeat of a man by a machine seemed everywhere to awaken nervous feelings of insecurity, like the launching of the first sputnik.

Sandra had rather hesitantly sought out Dr. Krakatower during the close of the morning session of play, still feeling a little guilty from her interview with Grabo. But Doc had seemed happy to see her and quite recovered from last night's defeat, though when she had addressed him as "Master Krakatower" he had winced and said, "Please, not that!" Another session of coffee and wine-and-seltzer had resulted in her getting an introduction to her first Soviet grandmaster, Serek, who had proved to be unexpectedly charming. He had just managed to draw his game with S h e r e v s k y (to the great amazement of the kibitzers, Sandra learned) and was most obliging about arranging for an interview.

Not to be outdone in gallantry, Doc had insisted on escorting Sandra to her seat in the stands—at the price of once more losing a couple of minutes on his clock. As a result her stock went up considerably with Dave, Bill and Judy. Thereafter they treated anything she had to say with almost annoying deference—Bill especially, probably in penance for his thoughtless cracks at Doc. Sandra later came to suspect that the kids had privately decided that she was Dr. Krakatower's mistress—probably a new one because she was so scandalously ignorant of chess. She did not disillusion them.

Doc lost again in the second round—to Jal.

IN the third round Lysmov defeated the Machine in 27 moves. There was a flaring of flashbulbs, a rush of newsmen to the phones, jabbering in the stands and much comment and analysis that was way over Sandra's head—except she got the impression that Lysmov had done something tricky.

The general emotional reaction in America, as reflected by the newspapers, was not too happy. One read between the lines that for the Machine to beat a man was bad, but for a Russian to beat an American machine was worse. A widely-read sports columnist, two football coaches, and several r u r a l politicians announced that chess was a morbid game played only by weirdies. De-

spite these thick-chested heman statements, the elusive mood of insecurity deepened.

Besides the excitement of the Lysmov win, a squabble had arisen in connection with the Machine's still-unfinished end game with Sherevsky, which had been continued through one morning session and was now headed for another.

Finally there were rumors that World Business Machines was planning to replace Simon Great with a nationally famous physicist.

Sandra begged Doc to try to explain it all to her in kindergarten language. She was feeling uncertain of herself again and quite subdued after being completely rebuffed in her efforts to get an interview with Lysmov, who had fled her as if she were a threat to his Soviet virtue.

Doc on the other hand was quite vivacious, cheered by his third-round draw with Jandorf.

"Most willingly, my dear," he said. "Have you ever noticed that kindergarten language can be far honester than the adult tongues? Fewer fictions. Well, several of us hashed over the Lysmov game until three o'clock this morning. Lysmov wouldn't, though. Neither would Votbinnik or Jal. You see, I have my communication problems with the Russians too.

"We finally decided that Lysmov had managed to guess with complete accuracy both the depth at which the Machine is analyzing in the opening and middle game (ten moves ahead instead of eight, we think—a prodigious achievement!) and also the main value scale in terms of which the Machine selects its move.

"Having that information, Lysmov managed to play into a combination which would give the Machine a maximum plus value in its value scale (win of Lysmov's queen, it was) after ten moves but a checkmate for Lysmov on his second move *after* the first ten. A human chess master would have seen a trap like that, but the Machine could not, because Lysmov was maneuvering in an area that did not exist for the Machine's perfect but limited mind. Of course the Machine changed its tactics after the first three moves of the ten had been played—it could see the checkmate then—but by that time it was too late for it to avert a disastrous loss of material. It was tricky of Lysmov, but completely fair. After this we'll all be watching for the opportunity to play the same sort of trick on the Machine.

"LYSMOV was the first of us to realize fully that *we are not playing against a metal monster but against a certain kind of programming.* If there are any weaknesses

we can spot in that programming, we can win. Very much in the same way that we can again and again defeat a flesh-and-blood player when we discover that he consistently attacks without having an advantage in position or is regularly overcautious about launching a counter-attack when he himself is attacked without justification."

Sandra nodded eagerly. "So from now on your chances of beating the Machine should keep improving, shouldn't they? I mean as you find out more and more about the programming."

Doc smiled. "You forget," he said gently, "that Simon Great can change the programming before each new game. Now I see why he fought so hard for that point."

"Oh. Say, Doc, what's this about the Sherevsky end game?"

"You are picking up the language, aren't you?" he observed. "Sherevsky got a little angry when he discovered that Great had the Machine programmed to analyze steadily on the next move after an adjournment until the game was resumed next morning. Sherevsky questioned whether it was fair for the Machine to 'think' all night while its opponent had to get some rest. Vanderhoef decided for the Machine, though Sherevsky may carry the protest to FIDE.

"Bah— I think Great wants us to get heated up over such minor matters, just as he is happy (and oh so obliging!) when we complain about how the Machine blinks or hums or smells. It keeps our minds off the main business of trying to outguess his programming. Incidentally, that is one thing we decided last night— Sherevsky, Willie Angler, Jandorf, Serek, and myself—that we are all going to have to learn to play the Machine without letting it get on our nerves and without asking to be protected from it. As Willie puts it, 'So suppose it sounds like a boiler factory even—okay, you can think in a boiler factory.' Myself, I am not so sure of that, but his spirit is right."

Sandra felt herself perking up as a new article began to shape itself in her mind. She said, "And what about WBM replacing Simon Great?"

Again Doc smiled. "I think, my dear, that you can safely dismiss that as just a rumor. I think that Simon Great has just begun to fight."

VI

ROUND Four saw the Machine spring the first of its surprises.

It had finally forced a draw against Sherevsky in the morning session, ending the long second-round game, and now was matched against Votbinnik.

The Machine opened Pawn

to King Four, Votbinnik replied Pawn to King Three.

"The French Defense, Binny's favorite," Dave muttered and they settled back for the Machine's customary four-minute wait.

Instead the Machine moved at once and punched its clock.

Sandra, studying Votbinnik through her glasses, decided that the Russian grandmaster looked just a trifle startled. Then he made his move.

Once again the Machine responded instantly.

There was a flurry of comment from the stands and a scurrying-about of officials to shush it. Meanwhile the Machine continued to make its moves at better than rapid-transit speed, although Votbinnik soon began to take rather more time on his.

The upshot was that the Machine made eleven moves before it started to take time to 'think' at all.

Sandra clamored so excitedly to Dave for an explanation that she had two officials waving at her angrily.

As soon as he dared, Dave whispered, "Great must have banked on Votbinnik playing the French—almost always does—and fed all the variations of the French into the Machine's 'm e m o r y' from MCO and maybe some other books. So long as Votbinnik stuck to a known variation of the French, why, the Machine could play from memory without analyzing at all. Then when a strange move came along—one that wasn't in its memory—only on the twelfth move yet!—the Machine went back to analyzing, only now it's taking longer and going deeper because it's got more time—six minutes a move, about. The only thing I wonder is why Great didn't have the Machine do it in the first three games. It seems so obvious."

Sandra ticketed that in her mind as a question for Doc. She slipped off to her room to write her "Don't Let a Robot Get Your Goat" article (drawing heavily on Doc's observations) and got back to the stands twenty minutes before the second time-control point. It was becoming a regular routine.

V o t b i n n i k was a knight down—almost certainly busted, Dave explained.

"It got terrifically complicated while you were gone," he said. "A real Votbinnik position."

"Only the Machine outbinniked him," Bill finished.

Judy hummed Beethoven's "Funeral March for the Death of a Hero."

Nevertheless Votbinnik did not resign. The M a c h i n e sealed a move. Its board blacked out and Vanderhoef, with one of his assistants standing beside him to witness, privately read the move off a small indicator on the console. Tomorrow he would feed the move back into the

Machine when play was resumed at the morning session.

Doc sealed a move too although he was two pawns down in his game against Grabo and looked tired to death.

"They don't give up easily, do they?" Sandra observed to Dave. "They must really love the game. Or do they hate it?"

"When you get to psychology it's all beyond me," Dave replied. "Ask me something else."

Sandra smiled. "Thank you, Dave," she said. "I will."

COME the morning session, Votbinnik played on for a dozen moves then resigned.

A little later Doc managed to draw his game with Grabo by perpetual check. He caught sight of Sandra coming down from the stands and waved to her, then made the motions of drinking.

Now he looks almost like a boy, Sandra thought as she joined him.

"Say, Doc," she asked when they had secured a table, "why is a rook worth more than a bishop?"

He darted a suspicious glance at her. "That is not your kind of question," he said sternly. "Exactly what have you been up to?"

Sandra confessed that she had asked Dave to teach her how to play chess.

"I knew those children would corrupt you," Doc said somberly. "Look, my dear, if you learn to play chess you won't be able to write your clever little articles about it. Besides, as I warned you the first day, chess is a madness. Women are ordinarily immune, but that doesn't justify you taking chances with your sanity."

"But I've kind of gotten interested, watching the tournament," Sandra objected. "At least I'd like to know how the pieces move."

"Stop!" Doc commanded. "You're already in danger. Direct your mind somewhere else. Ask me a sensible, down-to-earth journalist's question—something completely irrational!"

"Okay, why didn't Simon Great have the Machine set to play the openings fast in the first three games?"

"Hah! I think Great plays Lasker-chess in his programming. He hides his strength and tries to win no more easily than he has to, so he will have resources in reserve. The Machine loses to Lysmov and immediately starts playing more strongly—the psychological impression made on the other players by such tactics is formidable."

"But the Machine isn't ahead yet?"

"No, of course not. After four rounds Lysmov is leading the tournament with $3\frac{1}{2} - \frac{1}{2}$, meaning $3\frac{1}{2}$ in the win column and $\frac{1}{2}$ in the loss column..."

"How do you half win a

game of chess? Or half lose one?" Sandra interrupted.

"By drawing a game—playing to a tie. Lysmov's 3½ - ½ is notational shorthand for three wins and a draw. Understand? My dear, I don't usually have to explain things to you in such detail."

"I just didn't want you to think I was learning too much about chess."

"Ho! Well, to get on with the score after four rounds, Angler and Votbinnik both have 3 — 1, while the Machine is bracketed at 2½ — 1½ with Jal. But the Machine has created an impression of strength, as if it were all set to come from behind with a rush." He shook his head. "At the moment, my dear," he said, "I feel very pessimistic about the chances of neurons against relays in this tournament. Relays don't panic and fag. But the oddest thing..."

"Yes?" Sandra prompted.

"Well, the oddest thing is that the Machine doesn't play 'like a machine' at all. It uses dynamic strategy, the kind we sometimes call 'Russian', complicating each position as much as possible and creating maximum tension. But that too is a matter of the programming..."

DOC'S foreboding was fulfilled as round followed hard-fought round. In the next five days (there was a weekend recess) the Machine successively smashed Jandorf, Serek and Jal and after seven rounds was out in front by a full point.

Jandorf, evidently impressed by the Machine's flawless opening play against Votbinnik, chose an inferior line in the Ruy Lopez to get the Machine "out of the books." Perhaps he hoped that the Machine would go on blindly making book moves, but the Machine did not oblige. It immediately slowed its play, "thought hard" and annihilated the Argentinian in 25 moves.

Doc commented, "The Wild Bull of the Pampas tried to use the living force of his human personality to pull a fast one and swindle the Machine. Only the Machine didn't swindle."

Against Jal, the Machine used a new wrinkle. It used a variable amount of time on moves, apparently according to how difficult it "judged" the position to be.

When Serek got a poor pawn-position the Machine simplified the game relentlessly, suddenly discarding its hitherto "Russian" strategy. "It plays like anything but a machine," Doc commented. "We know the reason all too well— Simon Great—but doing something about it is something else again. Great is hitting at our individual weaknesses wonderfully well. Though I think I could play brilliant psychological chess myself if I had a machine to

do the detail work." Doc sounded a bit wistful.

The audiences grew in size and in expensiveness of wardrobe, though most of the cafe society types made their visits fleeting ones. Additional stands were erected. A hard-liquor bar was put in and then taken out. The problem of keeping reasonable order and quiet became an unending one for Vanderhoef, who had to ask for more "hushers." The number of scientists and computer men. Navy, Army and Space Force uniforms were more in evidence. Dave and Bill turned up one morning with a three-dimensional chess set of transparent plastic and staggered Sandra by assuring her that most bright young space scientists were moderately adept at this 512-square game.

Sandra heard that WBM had snagged a big order from the War Department. She also heard that a Syndicate man had turned up with a book on the tournament, taking bets from the more heavily heeled types and that a detective was circulating about, trying to spot him.

The newspapers kept up their front-page reporting, most of the writers personalizing the Machine heavily and rather too cutely. Several of the papers started regular chess columns and "How to Play Chess" features. There was a flurry of pictures of movie starlets and such sitting at chess boards. Hollywood revealed plans for two chess movies: "They Made Her a Black Pawn" and "The Monster From King Rook Square". Chess novelties and costume jewelry appeared. The United States Chess Federation proudly reported a phenomenal rise in membership.

SANDRA learned enough chess to be able to blunder through a game with Dave without attempting more than one illegal move in five, to avoid the Scholar's Mate most of the time and to be able to checkmate with two rooks though not with one. Judy had asked her, "Is *he* pleased that you're learning chess?"

Sandra had replied, "No, he thinks it is a madness." The kids had all whooped at that and Dave had said, "How right he is!"

Sandra was scraping the bottom of the barrel for topics for her articles, but then it occured to her to write about the kids, which worked out nicely, and that led to a humorous article "Chess Is for Brains" about her own efforts to learn the game, and for the nth time in her career she thought of herself as practically a columnist and was accordingly elated.

After his two draws, Doc lost three games in a row and still had the Machine to face and then Sherevsky. His 1 — 6 score gave him undisputed possession of last place.

He grew very depressed. He still made a point of squiring her about before the playing sessions, but she had to make most of the conversation. His rare flashes of humor were rather macabre.

"They have D i r t y Old Krakatower locked in the cellar," he muttered just before the start of the next to the last round, "and now they send the robot down to destroy him."

"Just the same, Doc," Sandra told him, "good luck."

Doc s h o o k his head. "Against a man luck might help. But against a Machine?"

"It's not the Machine you're playing, but the programming. Remember?"

"Yes, but it's the Machine that doesn't make the mistake. And a mistake is what I need most of all today. Somebody else's."

Doc must have looked very dispirited and tired when he left Sandra in the stands, for Judy (Dave and Bill not having arrived yet) asked in a confidential, womanly sort of voice, "What do you do for him when he's so unhappy?"

"Oh, I'm especially passionate," Sandra heard herself answer.

"Is that good for him?" Judy demanded doubtfully.

"Sh!" Sandra said, somewhat aghast at her irresponsibility and wondering if *she* were g e t t i n g tournament-nerves. "Sh, they're starting the clocks."

VII

KRAKATOWER had lost two pawns when the first time-control point arrived and was intending to resign on his 31st move when the Machine broke down. Three of its pieces moved on the electric board at once, then the board went dark and all the lights on the console went out except five which started winking like angry red eyes. The gray-smocked men a r o u n d Simon Great sprang silently into action, filing around back of the console. It was the first work anyone had seen them do except move screens around and fetch each other coffee. Vanderhoef hovered anxiously. Some flash bulbs went off. Vanderhoef shook his fist at the photographers. S i m o n Great did nothing. The Machine's clock ticked on. Doc watched for a while and then fell asleep.

When Vanderhoef jogged him awake, the Machine had just made its next move, but the repair-job had taken 50 minutes. As a result the Machine had to make 15 moves in 10 minutes. At 40 seconds a move it played like a dub whose general lack of skill was complicated by a touch of insanity. On his 43rd move Doc shrugged his shoulders apologetically and announced mate in four. There were more flashes. Vanderhoef shook his fist again. The m a c h i n e flashed:

by FRITZ LEIBER

YOU PLAYED BRILLIANTLY. CONGRATULATIONS!

Afterwards Doc said sourly to Sandra. "And *that* was one big lie—a child could have beat the Machine with that time advantage. Oh, what an ironic glory the gods reserved for Krakatower's dotage—to vanquish a broken-down computer! Only one good thing about it—that it didn't happen while it was playing one of the Russians, or someone would surely have whispered *sabotage*. And that is something of which they do not accuse Dirty Old Krakatower, because they are sure he has not got the brains even to think to sprinkle a little magnetic oxide powder in the Machine's memory box. Bah!"

Just the same he seemed considerably more cheerful.

Sandra said guilelessly, "Winning a game means nothing to you chess players, does it, unless you really do it by your own brilliancy?"

Doc looked solemn for a moment, then he started to chuckle. "You are getting altogether too smart, Miss Sandra Lea Grayling," he said. "Yes, yes—a chess player is happy to win in any barely legitimate way he can, by an earthquake if necessary, or his opponent sickening before he does from the bubonic plague. So— I confess it to you— I was very happy to chalk up my utterly undeserved win over the luckless Machine."

"Which incidentally makes it anybody's tournament again, doesn't it, Doc?"

"NOT exactly." Doc gave a wry little headshake. "We can't expect another fluke. After all, the Machine has functioned perfectly seven games out of eight, and you can bet the WBM men will be checking it all night, especially since it has no adjourned games to work on. Tomorrow it plays Willie Angler, but judging from the way it beat Votbinnik and Jal, it should have a definite edge on Willie. If it beats him, then only Votbinnik has a chance for a tie and to do that he must defeat Lysmov. Which will be most difficult."

"Well," Sandra said, "don't you think that Lysmov might just kind of let himself be beaten, to make sure a Russian gets first place or at least ties for it?"

Doc shook his head emphatically. "There are many things a man, even a chess master, will do to serve his state, but party loyalty doesn't go that deep. Look, here is the standing of the players after eight rounds." He handed Sandra a penciled list.

ONE ROUND TO GO

Player	*Wins*	*Losses*
Machine	5½	2½
Votbinnik	5½	2½

Angler	5	3
Jal	4½	3½
Lysmov	4½	3½
Serek	4½	3½
Sherevsky	4	4
Jandorf	2½	5½
Grabo	2	6
Krakatower	2	6

LAST ROUND PAIRINGS

Machine vs. Angler
Votbinnik vs. Lysmov
Jal vs. Serek
Sherevsky vs. Krakatower
Jandorf vs. Grabo

After studying the list for a while, Sandra said, "Hey, even Angler could come out first, couldn't he, if he beat the Machine and Votbinnik lost to Lysmov?"

"Could, could—yes. But I'm afraid that's hoping for too much, barring another breakdown. To tell the truth, dear, the Machine is simply too good for all of us. If it were only a little faster (and these technological improvements always come) it would outclass us completely. We are at that fleeting moment of balance when genius is almost good enough to equal mechanism. It makes me feel sad, but proud too in a morbid fashion, to think that I am in at the death of grandmaster chess. Oh, I suppose the game will always be played, but it won't ever be quite the same." He blew out a breath and shrugged his shoulders.

"As for Willie, he's a good one and he'll give the Machine a long hard fight, you can depend on it. He might conceivably even draw."

He touched Sandra's arm. "Cheer up, my dear," he said. "You should remind yourself that a victory for the Machine is still a victory for the USA."

DOC'S prediction about a long hard fight was decidedly not fulfilled.

Having White, the Machine opened Pawn to King Four and Angler went into the Sicilian Defense. For the first twelve moves on each side both adversaries pushed their pieces and tapped their clocks at such lightning speed (Vanderhoef feeding in Angler's moves swiftly) that up in the stands Bill and Judy were still flipping pages madly in their hunt for the right column in MCO.

The Machine made its thirteenth move, still at blitz tempo.

"Bishop takes Pawn, check, and mate in three!" Willie announced very loudly, made the move, banged his clock and sat back.

There was a collective gasp-and-gabble from the stands.

Dave squeezed Sandra's arm hard. Then for once forgetting that he was Dr. Caution, he demanded loudly of Bill and Judy, "Have you two idiots found that column yet? *The Machine's thirteenth move is a boner*!"

Pinning down the reference

with a fingernail, Judy cried, "Yes! Here it is on page 161 in footnote (e) (2) (B). Dave, *that same thirteenth move for White is in the book!* But Black replies Knight to Queen Two, not Bishop takes Pawn, check. And three moves later the book gives White a plus value."

"What the heck, it can't be," Bill asserted.

"But it *is*. Check for yourself. *That boner is in the book.*"

"Shut up, everybody!" Dave ordered, clapping his hands to his face. When he dropped them a moment later his eyes gleamed. "I got it now! Angler figured they were using the latest edition of MCO to program the Machine on openings, he found an editorial error and then he deliberately played the Machine into that variation!"

Dave practically shouted his last words, but that attracted no attention as at that moment the whole hall was the noisiest it had been throughout the tournament. It simmered down somewhat as the Machine flashed a move.

Angler replied instantly.

The Machine replied almost as soon as Angler's move was fed into it.

Angler moved again, his move was fed into the Machine and the Machine flashed:

I AM CHECKMATED.
CONGRATULATIONS!

VIII

NEXT morning Sandra heard Dave's guess confirmed by both Angler and Great. Doc had spotted them having coffee and a malt together and he and Sandra joined them.

Doc was acting jubilant, having just drawn his adjourned game with Sherevsky, which meant, since Jandorf had beaten Grabo, that he was in undisputed possession of Ninth Place. They were all waiting for the finish of the Votbinnik-Lysmov game, which would decide the final standing of the leaders. Willie Angler was complacent and Simon Great was serene and at last a little more talkative.

"You know, Willie," the psychologist said, "I was afraid that one of you boys would figure out something like that. That was the chief reason I didn't have the Machine use the programmed openings until Lysmov's win forced me to. *I* couldn't check every opening line in MCO and the *Archives* and *Shakhmaty*. There wasn't time. As it was, we had a dozen typists and proofreaders busy for weeks preparing that part of the programming and making sure it was accurate as far as following the books went. Tell the truth now, Willie, how many friends did you have hunting for flaws in the latest edition of MCO?"

Willie grinned. "Your un-

lucky 13th. Well, that's my secret. Though I've always said that anyone joining the Willie Angler Fan Club ought to expect to have to pay some day for the privilege. They're sharp, those little guys, and I work their tails off."

Simon Great laughed and said to Sandra, "Your young friend Dave was pretty sharp himself to deduce what had happened so quickly. Willie, you ought to have him in the Bleeker Street Irregulars."

Sandra said, "I get the impression he's planning to start a club of his own."

Angler snorted. "That's the one trouble with *my* little guys. They're all waiting to topple me."

Simon Great said, "Well, so long as Willie is passing up Dave, I want to talk to him. It takes real courage in a youngster to question authority."

"How should he get in touch with you?" Sandra asked.

While Great told her, Willie studied them frowningly.

"Si, are you planning to stick in this chess-programming racket?" he demanded.

Simon Great did not answer the question. "You try telling me something, Willie," he said. "Have you been approached the last couple of days by IBM?"

"You mean asking me to take over your job?"

"I said *I*BM, Willie."

"Oh." Willie's grin became a tight one. "I'm not talking."

THERE was a flurry of sound and movement around the playing tables. Willie sprang up.

"Lysmov's agreed to a draw!" he informed them a moment later. "The gangster!"

"Gangster because he puts you in equal first place with Votbinnik, both of you ahead of the Machine?" Great inquired gently.

"Ahh, he could have beat Binny, giving me sole first. A Russian gangster!"

Doc shook a finger. "Lysmov could also have *lost* to Votbinnik, Willie, putting you in second place."

"Don't think evil thoughts. So long, pals."

As Angler clattered down the stairs, Simon Great signed the waiter for more coffee, lit a fresh cigarette, took a deep drag and leaned back.

"You know," he said "it's a great relief not to have to impersonate the hyperconfident programmer for awhile. Being a psychologist has spoiled me for that sort of thing. I'm not as good as I once was at beating people over the head with my ego."

"You didn't do too badly," Doc said.

"Thanks. Actually, WBM is very much pleased with the Machine's performance. The Machine's flaws made it seem more real and more newsworthy, especially how it functioned when the going

got tough—those repairs the boys made under time pressure in your game, Savilly, will help sell WBM computers or I miss my guess. In fact nobody could have watched the tournament for long without realizing there were nine smart rugged men out there, ready to kill that computer if they could. The Machine passed a real test. And then the whole deal dramatizes what computers are and what they can and can't do. And not just at the popular level. The WBM research boys are learning a lot about computer and programming theory by studying how the Machine and its programmer behave under tournament stress. It's a kind of test unlike that provided by any other computer work. Just this morning, for instance, one of our big mathematicians told me that he is beginning to think that the Theory of Games *does* apply to chess, because you can bluff and counterbluff with your programming. And *I'm* learning about human psychology."

Doc chuckled. "Such as that even human thinking is just a matter of how you program your own mind?—that we're all like the Machine to that extent?"

"That's one of the big points, Savilly. Yes."

Doc smiled at Sandra. "You wrote a nice little news-story, dear, about how Man conquered the Machine by a palpitating nose and won a victory for international amity.

"Now the story starts to go deeper."

"A lot of things go deeper," Sandra replied, looking at him evenly. "Much deeper than you ever expect at the start."

The big electric scoreboard lit up.

FINAL STANDING

Player	*Wins*	*Losses*
Angler	6	3
Votbinnik	6	3
Jal	5½	3½
Machine	5½	3½
Lysmov	5	4
Serek	4½	4½
Sherevsky	4½	4½
Jandorf	3½	5½
Krakatower	2½	6½
Grabo	2	7

"It was a good tournament," Doc said. "And the Machine has proven itself a grandmaster. It must make you feel good, Simon, after being out of tournament chess for twenty years."

The psychologist nodded.

"Will you go back to psychology now?" Sandra asked him.

Simon Great smiled. "I can answer that question honestly, Miss Grayling, because the news is due for release. No. WBM is pressing for entry of the Machine in the Interzonal Candidates' Tournament.

They want a crack at the World's Championship."

Doc raised his eyebrows. "That's news indeed. But look, Simon, with the knowledge you've gained in this tournament won't you be able to make the Machine almost a sure winner in every game?"

"I don't know. Players like Angler and Lysmov may find some more flaws in its functioning and dream up some new stratagems. Besides, there's another solution to the problems raised by having a single computer entered in a grandmaster tournament."

Doc sat up straight. "You mean having more programmer-computer teams than just one?"

"Exactly. The Russians are bound to give their best players computers, considering the prestige the game has in Russia. And I wasn't asking Willie that question about IBM just on a hunch. Chess tournaments are a wonderful way to test rival computers and show them off to the public, just like cross-country races were for the early automobiles. The future grandmaster will inevitably be a programmer-computer team, a man-machine symbiotic partnership, probably with more freedom each way than I was allowed in this tournament—I mean the man taking over the play in some positions, the machine in others."

"You're making my head swim," Sandra said.

"MINE is in the same storm-tossed ocean," Doc assured her. "Simon, that will be very fine for the masters who can get themselves computers—either from their governments or from hiring out to big firms. Or in other ways. Jandorf, I'm sure, will be able to interest some Argentinian millionaire in a computer for him. While I... oh, I'm too old... still, when I start to think about it... But what about the Bela Grabos? Incidentally, did you know that Grabo is contesting Jandorf's win? Claims Jandorf discussed the position with Serek. I think they exchanged about two words."

Simon shrugged, "The Bela Grabos will have to continue to fight their own battles, if necessary satisfying themselves with the lesser tournaments. Believe me, Savilly, from now on grandmaster chess without one or more computers entered will lack sauce."

Dr. Krakatower shook his head and said, "Thinking gets more expensive every year."

From the floor came the harsh voice of Igor Jandorf and the shrill one of Bela Grabo raised in anger. Three words came through clearly: "...I challenge you..."

Sandra said, "Well, there's something you can't build into a machine—ego."

"Oh, I don't know about that," said Simon Great.

END

by FRITZ LEIBER

It's tough to see into minds when you're only a child — and tougher still when you see what scares you!

GRAMP

By Charles V. De Vet

"WHY is Gramma making mad pictures at you?" I asked Gramp.

Gramp looked at me. "What pictures, Chum?"

"Pictures in her mind like you're lazy. And like she wanted to hurt you," I said.

Gramp's eyes got wide. He kept looking at me, and then he said, "Get your cap, Chum. We're gonna take a little walk."

Gramp didn't say anything until we walked all the way to the main road and past Mr. Watchorn's corn field. I walked behind him, counting the little round holes his wooden leg made in the gravel. Finally Gramp said, "Abracadabra."

That was our secret word. It meant that if I was playing one of our games, I was to stop for awhile. Gramp and I had lots of games we played. One of them was where we made believe. Sometimes we'd play that Gramp and I had been working all day, when we really just stayed in the shade telling stories. Then when we got home and Gramma asked us what we had done, we'd tell her about how hard we had worked.

"I really did see mad pictures in Gramma's mind," I said.

"Have you ever seen pictures in anybody's mind before?" Gramp asked.

"I always see them," I said. "Don't you?"

"No," Gramp said after a

minute. "Other people can't either. You're probably the only little boy who can."

"Is that bad?"

"No," Gramp answered. "It's good. But remember how I told you that people don't like other people who are different? Well, even though seeing pictures like you do is a wonderful thing, other people won't like you if they know you can do it. So we'll just keep it a secret between us."

I was glad Gramp told me, because he always knows the best things to do. I'm his Chum. I love him better than anyone else in the whole world. Whenever the other kids tease me and call me Crazy Joe I go to Gramp and he tells me funny stories and makes me laugh.

I remember the first time he told me about people hating other people who are different.

"Why do the kids call me Crazy Joe and laugh at me?" I asked him.

"Well, you see," Gramp said slowly, "your Daddy worked for Uncle Sam in a big place where they make things that the government won't tell anybody about. Then your Daddy got sick from something in the big place. After a long time he went up to stay with God. Then God took Mommy too, when He gave you to her. And now you're our little boy, mine and Gramma's. And because you're a very special kind of little boy, the other children are jealous. So I wouldn't play with them any more if they tease you. Just don't let them see you're afraid of them. You'll always be Gramp's Little Joe."

I love Gramp very much...

We kept walking until we came to Fayette. We went into Carl Van Remortal's store. Gramp sat on a chair by the big iron stove and I sat on his knee on his good leg. The stove must be real old, because it's got 1926 on its door in big iron letters.

"Tell me the pictures you see in Mr. Van's mind," Gramp whispered in my ear, "but don't let him hear you."

"He's making pictures of the fishing boats coming in," I said. "In the pictures he's talking to Jack La Salle and giving him some money for his fish... The pictures are getting all mixed up now. He's putting the fish in ice in boxes, but other pictures show him in church. Jack La Salle is in the church too, and Mr. Van's sister Margaret is dressed in a long white dress and standing alongside him."

"He's thinking that Jack La Salle will be marrying Margaret pretty soon," Gramp said. "What else is he thinking?"

"The pictures are coming so fast now that I can't name them all," I said.

Mr. Lawrence St. Ours came into the store, and Gramp told me to read what he was think-

ing. I looked inside his head.

"He's making pictures of himself driving a car, and buying bread, and bacon, and piling hay on his farm, and..." I said, but then I had to stop. "All the pictures come so fast that I can't read them," I told Gramp. "Everybody makes blurry pictures like that most of the time."

"Instead of trying to tell me what the pictures are, see if you can understand what they mean," Gramp said.

I tried but it was awful hard and pretty soon I got tired and Gramp and I left the store and went back home.

The next morning Gramp and I went out in the barn and Gramp said, "Now let's see what we got here." He had me try to do a lot of things, like lifting something without touching it, and trying to make chickens run by making a picture of them doing that and putting it in their minds. But I couldn't do any of them.

After a while he said, "Let's go down to the store again."

WE went to the store almost every day after that. Then sometimes we just walked around Fayette, and Gramp had me practice reading what the pictures in people's minds meant instead of just what they looked like. Sometimes I did it real good. Then Gramp would buy me some candy or ice cream.

One day we were following Mr. Mears and I was telling Gramp what I saw in Mr. Mears' mind when Mr. St. Ours drove by in his car. "Mr. Mears is making pictures about feeding meat to Mr. St. Ours's dog and the dog is crawling away and dying," I said to Gramp.

Gramp was real interested. He said, "Watch close and read everything you can about that." I did. After, Gramp seemed very happy. He bought me a big chocolate bar that time. Chocolate is my best kind of candy.

I read lots of things in other people's minds that made Gramp feel good too, and he bought me candy just about every day.

Gramp seemed to have money all the time now instead of having to ask Gramma for any. She wanted to know where he got all the money. But he just smiled with his right cheek like he does and wouldn't tell her. Most of the people in town didn't seem to like Gramp any more. They made mad pictures about him whenever we met them.

Sometimes when we were in the store Mrs. Van would come in and she would talk to me. She was awful nice. But she always had sad pictures in her mind and sometimes she would cough real hard and hold a handkerchief up in front of her mouth.

When she did that Mr. Van used to get sad too. In his pictures Mrs. Van would be dead and laying in a coffin

and they would be burying her in a big hole in the ground. Mr. Van was nice too. He gave me crackers and cookies, or sometimes a big thin slice of cheese.

One night Gramp was holding me and buying some groceries and Mr. Van was putting them in a cardboard box, and he was thinking about going to the bank in Escanaba and cashing a check. And the man gave him a big handful of money.

I told Gramp, but then Mr. Van came close. I didn't say anymore, like Gramp had told me. Mr. Van was whistling now. He made pictures of giving the money to Mrs. Van. She was getting on a train and going to a place where it was sunny all the time, and her cough went away and she wasn't skinny any more. In his mind Mrs. Van was real pretty. She didn't have the long nose like she really has.

When we got in our car Gramp was excited. He asked me where Mr. Van had put the money he brought back from Escanaba.

He had bad pictures in his mind about taking Mr. Van's money and I didn't want to tell him. But he grabbed my arm so hard it hurt and I began to cry. Gramp never hurt me before.

"What are you crying for?" he asked me, cranky.

"I don't want you to take Mr. Van's money," I told him.

Gramp let go of my arm and didn't say anything for a while.

"Sometimes the pictures you see aren't true," he said. "You know that." He took out his blue handkerchief and made me blow my nose. "Like when you see pictures in Gramma's mind about her hurting me," he said. "She never does, you know. So the pictures aren't true. It's just what we call imagination."

"But your pictures are bad! They make me scared," I said.

"We all make bad pictures like that, but we don't mean them," Gramp said. "Remember how you said that you'd like to eat the whole apple pie last Sunday? You probably made pictures of doing that. But you never did, because you know that Gramma and me should have some of it too." I guess Gramp can explain just about everything.

So I told him where Mr. Van had hid the money under a box of brown sugar. Gramp smiled and started the car.

He let me steer while it was going slow. "Who's my Chum?" he asked.

"I am," I said, and I laughed real happy.

THE next day when I got up Gramp was gone.

I went back of the barn and played. I got a bunch of tin cans and punched holes in them with a nail like Gramp showed me, and I made steps out of rocks and put a can on each step. I poured water in

the top can. It ran through the holes from each can to the other all the way down the steps.

I heard our car come in the front yard.

I went around the barn, and Gramp was just going up the steps to the house. He had been to Fairport where the big store is, and he had bought a lot of things that he was carrying in his arms. At first I was glad because he had bought something that was for me too.

But then I saw some bad pictures mixed with the happy ones—of Gramp breaking a window in Mr. Van's store when it was dark and going in and taking something from underneath the brown sugar box.

"You told me you wouldn't take Mr. Van's money. And you did!" I said.

"Ssh," Gramp said. He put his packages on the porch and sat down and took me on his lap. He took a deep breath. "Remember what I told you about imagination, Chum?" he asked me. "So you know you're not supposed to believe all the pictures you see. Now you're Gramp's Chum. And I want you to promise me again not to tell anyone but me what you see, and I'll tell you if the pictures are real or not. Promise?"

I promised, and Gramp opened one of the packages. He took out two new pistols and a belt with double holsters to carry them in. He bent over and buckled them on me.

"You look just like Hoppy now," he said.

I gave him a big kiss, and ran back of the barn to shoot robbers.

IN the afternoon Gramp was playing he was a bad Indian and trying to scalp me when a strange car drove in our yard.

Mr. Van and two men with badges got out.

Mr. Van was real mad. "We've come after the money, Bill," he said.

Gramp got white. He was scared, but he said, loud, "What the hell are you talking about?"

"You know what, Bill," Mr. Van said. "Someone saw you break into the store. It will go easier on you if you admit it."

"I told you I don't know what you're talking about," Gramp said. His eyes moved kind of quick. Then he noticed me and he walked over to me. "That's a fine way to talk in front of the boy," he said over his shoulder. He took my hand. "Come on, Chum. We're going in the house."

"Just a minute," the biggest policeman said. "We've got a few questions that we have to ask you."

Gramp made believe he was brushing some dirt from my pants. "Did anyone see me

take the money, Chum?" he whispered to me.

"No," I said, even though I didn't understand exactly. "Mr. Van is just pretending he knows you took it but he doesn't."

"Good boy." Gramp patted me on the head. "Go into the house now."

He turned and walked back to the three men, pushing his wooden leg into the ground hard. I didn't go in the house, though.

"Now I've had just about enough of this," Gramp said, with a big frown on his face. "You can't bluff me, Van. Say what you got to say, and get off my property."

Mr. Van's shoulders seemed to sag and he got sad. He made the pictures in his mind of Mrs. Van being dead and being put in a big hole.

It made me so sorry I couldn't stand it, and I cried, "Tell him you got his money under the seat in our car! Please, Gramp! Give it back to him."

Nobody said anything, but everybody turned and looked at me.

They stood real still. I saw in Gramp's mind that I had been bad, bad. I ran to him and put my face in his coat and began to cry. I couldn't help it.

After a minute Gramp knelt on his good knee in front of me and took my cheeks in both his hands.

"I've let you down, Chum," he said. He wasn't mad any more.

He picked me up in his arms. "You needed me, Little Joe," he said. "You needed me." His eyes were all smudgy. He squeezed me so hard I couldn't breathe, almost.

Then he put me down and said, "Come on," to the two policemen. He walked away between them.

Gramp!

The pictures in his mind were awful. I could hardly bear to look at them.

The worst picture was—me. I cried and cried. **END**

by THEODORE STURGEON

the other IF

BACK in 1944, after some tropical adventures, no writing for 2½ years, and full of ambitions for my re-entry into print in the soon-to-be-had postwar world, I invented a new magazine. In my naivete, I worked on the idea late at night when no one else was around and kept the material in a locked file when I went out, so sure I was that the idea, if it got into other hands, would instantly light up the sky while moneyed publishers tumbled over one another's shoulders trying to force currency on the thief. The time came, however, when even I had to realize that one just doesn't produce a magazine single-handed, performing all functions unseen by others until it hits the stands; no, not even if one's name is Leo Margulies.

About this time I began to get letters from one Groff Conklin about, of all things, his desire to start a new magazine after the war was over. I had not yet met Groff (now one of my most valued friends) and I wish I had a multiflanged double-ended detemporizer so I could travel back through time and see through his eyes what he thought of me and my wild idea, and at the same time recapture my picture of him. All I can tell you for sure is that I must have seemed much more knowledgeable than I actually was, and he seemed as energetically warm and enthusiastic as he actually is. And then, somewhere along the line, we got busy, he with his anthologies, I with my stories. Maybe it was just the matter of a hundred thousand bucks or so for capital, which neither of us seemed to have at the time. But we did quite a bit of work on it. I designed a cover and had an artist friend render it for me. It was very striking, somewhat along the lines of an old *Unknown* typographical cover, with a background of hemorrhage

brown and lettering which, planned as crushed grape, came out as bruised broccoli. The two letters of the title, lower case and quite fat, started in the upper left-hand corner and their pedestals ran all the way to the bottom.

We called it—IF.

The years went by and other things piled up, and the file of correspondence, the prospectus, the calculations and the cover dummy fell into a drawer somewhere (no longer locked) and stayed there until one day I got a phone call from one Paul Fairman, a nice guy and a pretty fair country writer as well. He was starting a new magazine and he was calling it IF. All knowledgeable again, I had lunch with him and gave him a lot of good advice about how he couldn't get any stories unless he had money to pay for them and he couldn't get that without a publisher, and it wasn't the right time to start a magazine. I gave him the cover dummy as a booby prize and he thanked me for everything. He then went out and got money and backing and stories (one of them from me) and started the magazine. It has existed more or less constantly ever since. It has changed publishers and editors and format; and just to complete the series of unlikely blows IF and I have glancingly struck one another during our careers, I now find myself one of its editors while living ten miles away from where Mr. James Quinn used to publish it, and Larry Shaw used to edit it.

But for all its growth and change, IF has never become *my* IF—the other IF. I do not intend to make it so. There is, however, meat enough in its basic idea to afford you some pretty fascinating chewing. The moral, in case one is called for, would seem to be that your nova-burst of an inspiration might serve, one day, to illuminate a few inner pages. Or maybe it's aim for the stars, you'll reach the treetops.

THE other IF was to be a *sort* of s c i e n c e fiction magazine. But unlike anything else in the field, it was to be built around what, to me, was (and is) the most compelling single component of some science fiction—extrapolation, or what I like to call "gunsight vision. You line up something near at hand with something not quite so near, but real and reachable. Sighting the line between them, your vision is aligned by them to something r e m o t e—but clearly indicated. If I learn about a synchrotron, and then find out that the circular track can be straightened out to make a linear accelerator, I can by this knowledge clearly visualize a ray cannon or a space drive on the same general principles. If I read about ground-effect cars, and then

find out that someone has designed a hand-pushed utility car not powered, merely lifted by a small motor, I can visualize immensely long trains traveling over a highway built like a shallow ditch, pulled by a more or less conventional truck-tractor, with perhaps a wheeled caboose for braking.

The principle works with people, too. One of the narrative knacks so generously given me by Will Jenkins (Murray Leinster) during those visits I mentioned in the last issue uses the same basic theory. To create plot from character, he told me, you take someone you know and understand and put him in a (for him) totally impossible situation. Then you let him work his way out of it by being himself—by being unconquerably, unswervingly and in all respects himself. His illustration was the yarn of a sea captain who after a storm found himself alone in the ocean with a bit of driftwood. What he *was* was a captain—which he couldn't be because he had no ship. His way out (in typical Leinster "what's he doing *that* for?" prose) was to hold up his shirt on a stick to catch the wind for nine hours, then to drift quietly for two days, then to use the shirt again for six hours, whereupon he reached an island. Being what he was, he knew his exact position when he lost his ship, he knew the prevailing winds, he knew the currents in the area. The germane point here is that when he had no ship to command, he became one.

Another common example is the sweet little old lady thrust into the den of thieves, throwing them all into conniptions with her unchanging concern with tea-time and vespers. In short, take two mismatched knowns, extend the line between them and they'll point out a discovery.

Now, if you want to extrapolate in more detail, and/or with more accuracy, the rifle-sights—two points—are not enough. Put just three points on a sheet of graph paper and join them, and you have a curve with certain characteristics. You can extend this, keeping the same characteristics, a distance beyond the third known point, with a reasonable assumption that when the fourth point is discovered it will lie in your curve. You can't extend it too far, though, and still expect reasonable accuracy. But with five points—fifty—five hundred—the exact nature of your curve becomes so apparent that you have to be right when you extend it. You can write good *science*-fiction this way—studying known science until you know it so well you can make a fair extrapolation. You can write good science-*fiction* by studying just as hard and then throwing a wild factor in somewhere up in the extrapolated area—precisely what

Asimov did in the Foundation series when he introduced The Mule into the millennia-long "future history" drawn up by the psycho-historian Selden.

NOW we're getting close to the mainspring of the other IF. Some years ago Jim Blish got so exercised by the alarming growth of the New York Port Authority, a local phenomenon which builds and operates tunnels, bridges and airports in the New York-New Jersey complex, that he sharpened up his typewriter and in seventy-some thousand words showed what would happen if this went on for two or three hundred years. Poul Anderson wrote two brilliant interplanetary stories, one clearly about NATO, the other dealing with the Marshall Plan. These three stories, and L. Ron Hubbard's *Final Blackout*, are yarns I'd have taken for the other IF had there been one (and if other editors hadn't gotten there first.)

This kind of thing would have been the body of the magazine; but the departure, the scintillating Idea, was the one, or possibly two items in each issue under the general classification *If this goes on...*

(That happens to be a Heinlein title. I am not referring to his story. Just look at the words.)

Now, every citizen makes this kind of extrapolation all the time. If the boss slams his hat on the rack and doesn't answer the receptionist's "G'morning" you have evidence from 'way back what kind of morning it's going to be. If your older brother has moaned his way through Algebra 3 with Miss G., well-known battle-axe, for a teacher, you know pretty much what's in store for you that fine September morn when you find yourself in her class. Or turn the thing around and get into the hindsight department. When Sue marries Joe instead of Sam, to your utter astonishment, and then you suddenly slap yourself on the head and say "of *course!* Remember when they...and that other time...and the thing that happened at the Christmas party..." and it all abruptly makes sense; well, say you had had the wit to notice and correctly interpret those things; you'd have been able to predict that marriage, wouldn't you?

To get printed in this special section of the other IF, then, you'd have to look about you and see what's going on. You have to study it until you understand it. You'd have to wait, perhaps, until something new happened, giving you two points—the rifle-sights. And then study out more points, five, fifty, five hundred, until you felt able to extrapolate —oh, two days, a week, four years, ten. Then you'd write the piece and send it in, and if in four years or ten you

proved to be dead wrong, it would be just because you didn't plot enough points. (Unless there was a wild factor; and even those can be predicted sometimes. Your hindsight tells you so.)

I dreamed such dreams about the other IF! It'd be on the stands a few months, see, and then I'd get this letter from a young government official suggesting it might be time for a conservative revival, and "B. Goldwater" would go on the table of contents. A Mr. Willkie would write a reasoned conviction that we are one species and one world. A minor union official would predict that the auto workers would one day ask for a guaranteed annual wage, and Reuther would go into the semi-annual index. An obscure refugee scientist named Wernher would write a piece with the laughable conclusion that the Russians would be first with a satellite. Finally, years later, *Time* would do a takeout on IF in the Press section, under the caption *Newsstand Nostradamus* or *Pulp Prognosticator*, with a cut of me holding up the table of contents of the June 1946 issue, with my finger on the article, *Why I Can't Lose in '48*, by H. S. Truman. Wonderful, wonderful dreams

And yet...

AND yet, wouldn't it be wonderful to make a reasoned prediction, see it in print three months later, and have it coincide with that very day's headlines? And what if you goof? I used to own a 1939 *Reader's Digest* bearing an article about Why Japan Will Never Fight a War Against the U.S. I read an 1804 article (I suspect by a stockholder in a canal-boat firm) reasoning very plausibly that a locomotive could not pull a train because only one mathematical point of each wheel was tangent to the track, and the cars ("carriages," he said) would just be too heavy to start moving. So what? You can take it.

And I do mean *you*. I really do.

I have not only a liking, but a profound respect for the kind of mind which reads science fiction. It's a good mind. It recognizes no horizons. It is not afraid to go far out. And in many cases its ability to reason goes all the way from the awesome to the frightening. S-f has predicted a lot, has been wrong more often than right, but has never, I do believe, really and truly tried to predict from the here and now to 90 days off. Are you game? Do you want to try it? If you do, I'll go along with you for two issues. Then we'll skip one and take stock.

The time element is perfect for this caper. It takes just about three months from the time you mail it for it to be printed and distributed. You're reading this as spring starts to stir the turf. I write it in early December. Major

Glenn has not yet been launched. Governor Rockefeller, newly returned from the South Pacific, announces a shelter plan for everybody every place, over and above homes and schools. Swedish U.N. planes have just bombed a Katangese airport. Are you oriented?

Then let me establish a format, and stick my own neck out. I want you to notice that these are not wild guesses: if you want to go a little deeper into your reasoning, by all means do so.

PREDICTION ONE

●*Elizabeth Taylor's* Cleopatra *will be finished and released.*
●*Blondes will be "out," brunettes "in."*
●*Shoulder-length hair, with bangs, will be The Thing.*
●*Necklines will do something they haven't done publicly since Louis XIV.*

PREDICTION TWO

●*Many schools are overcrowded and operating on shifts because funds cannot be found for building additions.*
●*School fallout shelters frequently cost more than building additions.*
●*Therefore by the time this appears there will have been news stories about at least seven violent protests by parent-taxpayers against the installation of shelters in schools which have not been able to build additions.*

PREDICTION THREE

●*Jack Paar has managed to be in several kinds of spectacular trouble.*
●*He is due to leave the air in March.*
●*He will do so in the midst of the most elaborate trouble he has yet managed.*

Get the idea? It would, of course, be preferable if your predictions were scientific or bore on s-f; mine come right off the top of my head, where the point is. All right: here are the ground rules:

1. Deadline for the September issue (due out in July): March 20. Deadline for the November issue (due out in September): May 25. (That means I'll be able to feature some of your best at the Chicon: Pick-Congress Hotel, Chicago, Aug. 31—Sept. 3.)

2. No big prizes: this is for kicks. And for research: I *know* you are capable of observing enough contributory details, of sensing the trend of events accurately enough, to come up with some truly startling results. (But just to make the game more interesting, we'll reward some of the best guesses with free IF subscriptions.)

3. And please — no correspondence except through these pages. **END**

It was just a little black box,

useful for getting rid of things.

Trouble was, it worked too well!

THE EXPENDABLES

BY JIM HARMON

"YOU see my problem, Professor?" Tony Carmen held his pinkly manicured, flashily ringed hands wide.

I saw his problem and it was warmly embarrassing.

"Really, Mr. Carmen," I said, "this isn't the sort of thing you discuss with a total stranger. I'm not a doctor—not of medicine, anyway—or a lawyer."

"They can't help me. I need an operator in your line."

"I work for the United States government. I can't become involved in anything illegal."

Carmen smoothed down the front of his too-tight midnight blue suit and touched the diamond sticking in his silver tie. You can't, Professor Venetti? Ever hear of the Mafia?"

"I've heard of it," I said uneasily. "An old fraternal organization something like the Moose or Rosicrucians, founded in Sicily. It allegedly controls organized crime in the U.S. But that is a responsibility-eluding myth that honest Italian-Americans are stamping out. We don't even like to see the word in print."

"I can understand *honest* Italian-Americans feeling that way. But guys like me know the Mafia is still with it. We can put the squeeze on marks like you pretty easy."

You don't have to tell even a third generation American about the Mafia. Maybe that was the trouble. I had heard too much and for too long. All the stories I had ever heard about the Mafia, true or false, built up an unendurable threat.

"All right, I'll try to help you, Carmen. But...that is, you didn't kill any of these people?"

He snorted. "I haven't killed

anybody since early 1943."

"Please," I said weakly. "You needn't incriminate yourself with me."

"I was in the Marines," Carmen said hotly. "Listen, Professor, these aren't no Prohibition times. Not many people get made for a hit these days. Mother, most of these bodies they keep ditching at my club haven't been murdered by anybody. They're accident victims. Rumbums with too much anti-freeze for a summer's day, Spanish-American War vets going to visit Teddy in the natural course of events. Harry Keno just stows them at my place to embarrass me. Figures to make me lose my liquor license or take a contempt before the Grand Jury."

"I don't suppose you could just go to the police—" I saw the answer in his eyes. "No. I don't suppose you could."

"I told you once, Professor, but I'll tell you again. I have to get rid of these bodies they keep leaving in my kitchen. I can take 'em and throw them in the river, sure. But what if me or my boys are stopped en route by some tipped badge?"

"Quicklime?" I suggested automatically.

"What are you talking about? Are you sure you're some kind of scientist? Lime doesn't do much to a stiff at all. Kind of putrifies them like..."

"I forgot," I admitted. "I'd read it in so many stories I'd forgotten it wouldn't work. And I suppose the furnace leaves ashes and there's always traces of hair and teeth in the garbage disposal... An interesting problem, at that."

"I figured you could handle it," Carmen said, leaning back comfortably in the favorite chair of my bachelor apartment. "I heard you were working on something to get rid of trash for the government."

"That," I told him, "is restricted information. I subcontracted that work from the big telephone laboratories. How did you find it out?"

"Ways, Professor, ways."

The government did want me to find a way to dispose of wastes—radioactive wastes. It was the most important problem any country could have in this time of growing atomic industry. Now a small-time gangster was asking me to use this research to help him dispose of hot corpses. It made my scientific blood seeth. But the shadow of the Black Hand cooled it off.

"Maybe I can find something in that area of research to help you," I said. "I'll call you."

"Don't take too long, Professor," Carmen said cordially.

THE big drum topped with a metallic coolie's hat had started out as a neutralizer for radioactivity. Now I didn't know what to call it.

The AEC had found burying canisters of hot rubbish

in the desert or in the Gulf had eventually proved unsatisfactory. Earth tremors or changes of temperature split the tanks in the ground, causing leaks. The undersea containers rusted and corroded through the time, poisoning fish and fishermen.

Through the SBA I had been awarded a subcontract to work on the problem. The ideal solution would be to find a way to neutralize radioactive emanations, alpha, beta, X et cetera. (No, my dear, et cetera rays aren't any more dangerous than the rest.) But this is easier written than done.

Of course, getting energy to destroy energy without producing energy or matter is a violation of the maxim of the conservation of energy. But I didn't let that stop me—any more than I would have let the velocity of light put any limitations on a spacecraft engine had I been engaged to work on one. You can't allow other people's ideas to tie you hand and foot. There are some who tell me, however, that my refusal to honor such time-tested cliches is why I only have a small private laboratory owned by myself, my late wife's father and the bank, instead of working in the vast facilities of Bell, Du Pont, or General Motors. To this, I can only smile and nod.

But even refusing to be balked by conservative ideas, I failed.

I could not neutralize radioactivity. All I had been able to do (by a basic disturbance in the electromagnetogravitational co-ordinant system for Earth-Sun) was to reduce the mass of the radioactive matter.

This only concentrated the radiations, as in boiling contaminated water. It did make the hot stuff vaguely easier to handle, but it was no breakthrough on the central problem.

Now, in the middle of this, I was supposed to find a way to get rid of some damned bodies for Carmen.

Pressed for time and knowing the results wouldn't have to be so precise or carefully defined for a racketeer as for the United States government, I began experimenting.

I cut corners.

I bypassed complete safety circuits.

I put dangerous overloads on some transformers and doodled with the wiring diagrams. If I got some kind of passable incinerator I would be happy.

I turned the machine on.

The lights popped out.

There were changes that should be made before I tried that again, but instead I only found a larger fuse for a heavier load and jammed that in the switchbox.

I flipped my machine into service once again. The lights flickered and held.

The dials on my control board told me the story. It was hard to take.

But there it was.

The internal scale showed zero.

I had had a slightly hot bar of silver alloy inside. It was completely gone. Mass zero. The temperature gauge showed that there had been no change in centigrade reading that couldn't be explained by the mechanical operation of the machine itself. There had been no sudden discharge of electricity or radioactivity. I checked for a standard anti-gravity effect but there was none. Gravity inside the cylinder had gone to zero but never to minus.

I was at last violating conservation of energy—not by successfully inverting the cube of the ionization factor, but by destroying mass...by simply making it cease to exist with no cause-and-effect side effects.

I knew the government wouldn't be interested, since I couldn't explain how my device worked. No amount of successful demonstration could ever convince anybody with any scientific training that it actually did work.

But I shrewdly judged that Tony Carmen wouldn't ask an embarrassing "how" when he was incapable of understanding the explanation.

"YEAH, but how does it work?" Tony Carmen demanded of me, sleeking his mirror-black hair and staring up at the disk-topped drum.

"Why do you care?" I asked irritably. "It will dispose of your bodies for you."

"I got a reason that goes beyond the stiff, but let's stick to that just for now. *Where are these bodies going?* I don't want them winding up in the D.A.'s bathtub."

"Why not? How could they trace them back to you?"

"You're the scientist," Tony said hotly. "I got great respect for those crime lab boys. Maybe the stiff got some of my exclusive brand of talc on it, I don't know."

"Listen here, Carmen," I said, "what makes you think these bodies are going somewhere? Think of it only as a kind of—incinerator."

"Not on your life, Professor. The gadget don't get hot so how can it burn? It don't use enough electricity to fry. It don't cut 'em up or crush 'em down, or dissolve them in acid. I've seen disappearing cabinets before."

Mafia or not, I saw red. "Are you daring to suggest that I am working some trick with trap doors or sliding panels?"

"Easy, Professor," Carmen said, effortlessly shoving me back with one palm. "I'm not saying you have the machine rigged. It's just that you have to be dropping the stuff through a sliding panel in—well, everything around us. You're sliding all that aside and dropping things through. But I want to know where

they wind up. Reasonable?"

Carmen was an uneducated lout and a criminal but he had an instinctive feel for the mechanics of physics.

"I don't know where the stuff goes, Carmen," I finally admitted. "It might go into another plane of existence. 'Another dimension' the writers for the American Weekly would describe it. Or into our past, or our future."

The swarthy racketeer pursed his lips and apparently did some rapid calculation.

"I don't mind the first two, but I don't like them going into the future. If they do that, they may show up again in six months."

"Or six million years."

"You'll have to cut that future part out, Professor."

I was beginning to get a trifle impatient. All those folk tales I had heard about the Mafia were getting more distant. "See here, Carmen, I could lie to you and say they went into the prehistoric past and you would never know the difference. But the truth is, I just don't know where the processed material goes. There's a chance it may go into the future, yes. But unless it goes exactly one year or exactly so many years it would appear in empty space ...because the earth will have moved from the spot it was transmitted. I don't know for sure. Perhaps the slight Deneb-ward movement of the Solar System would wreck a perfect three-point landing even then and cause the dispatched materials to burn up from atmospheric friction, like meteors. You will just have to take a chance on the future. That's the best I can do."

Carmen inhaled deeply. "Okay. I'll risk it. Pretty long odds against any squeal on the play. How many of these things can you turn out, Professor?"

"I can construct a duplicate of this device so that you may destroy the unwanted corpses that you would have me believe are delivered to you with the regularity of the morning milk run."

The racketeer waved that suggestion aside. "I'm talking about a big operation, Venetti. These things can take the place of incinerators, garbage disposals, waste baskets..."

"Impractical," I snorted. "You don't realize the tremendous amount of electrical power these devices require..."

"Nuts! From what you said, the machine is like a TV set; it takes a lot of power to get it started, but then on it coasts on its own generators."

"THERE'S something to what you say," I admitted in the face of his unexpected information. "But I can hardly turn my invention over to your entirely persuasive salesmen, I'm sure. This is part of the results of an

investigation for the government. Washington will have to decide what to do with the machine."

"Listen, Professor," Carmen began, "the Mafia—"

"What makes you think I'm any more afraid of the Mafia than I am of the F.B.I.? I may have already sealed my fate by letting you in on this much. Machinegunning is hardly a less attractive fate to me than a poor security rating. To me, being dead professionally would be as bad as being dead biologically."

Tony Carmen laid a heavy hand on my shoulder. I finally deduced he intended to be cordial.

"Of course," he said smoothly "you have to give this to Washington but there are *ways*, Professor. I know. I'm a business man—"

"You *are?*" I said.

He named some of the businesses in which he held large shares of stock.

"You *are.*"

"I've had experience in this sort of thing. We simply *leak* the information to a few hundred well selected persons about all that your machine can do. We'll call 'em Expendables, because they can expend anything."

"I," I interjected, "planned to call it the Venetti Machine."

"Professor, who calls the radio the Marconi these days?"

"There are Geiger-Muller Counters, though," I said.

"You don't have to give a Geiger counter the sex appeal of a TV set or a hardtop convertible. We'll call them Expendables. No home will be complete without one."

"Perfect for disposing of unwanted bodies," I mused. "The murder rate will go alarmingly with those devices within easy reach."

"Did that stop Sam Colt or Henry Ford?" Tony Carmen asked reasonably...

Naturally, I was aware that the government would *not* be interested in my machine. I am not a Fortean, a psychic, a psionicist or a screwball. But the government frequently gets things it doesn't know what to do with—like airplanes in the 'twenties. When it doesn't know what to do, it doesn't do it.

There have been hundreds of workable perpetual motion machines patented, for example. Of course, they weren't vices in the strictest sense of the word. Many of them used the external power of gravity; they would wear out or slow down in time from friction, but for the meanwhile, for some ten to two hundred years they would just sit there, moving. No one had ever been able to figure out what to do with them.

I knew the AEC wasn't going to dump tons of radioactive waste (with some possible future reclaimation value) into a machine which they

didn't believe actually could work.

Tony Carmen knew exactly what to do with an Expendable once he got his hands on it.

Naturally, that was what I had been afraid of.

THE closed sedan was warm, even in early December.

Outside, the street was a progression of shadowed block forms. I was shivering slightly, my teeth rattling like the porcelain they were. Was this the storied "ride," I wondered?

Carmen finally returned to the car, unlatched the door and slid in. He did not reinsert the ignition key. I did not feel like sprinting down the deserted street.

"The boys will have it set up in a minute," Tony the racketeer informed me.

"What?" The firing squad?

"The Expendable, of course."

"Here? You dragged me out here to see how you have prostituted my invention? I presume you've set it up with a 'Keep Our City Clean' sign pasted on it."

He chuckled. It was a somewhat nasty sound, or so I imagined.

A flashlight winked in the sooty twilight.

"Okay. Let's go," Tony said, slapping my shoulder.

I got out of the car, rubbing my flabby bicep. Whenever I took my teen-age daughter to the beach from my late wife's parents' home, I frequently found 230 pound bullies did kick sand in my ears.

The machine was installed on the corner, half covered with a gloomy white shroud, and fearlessly plugged into the city lighting system via a blanketed streetlamp. Two hoods hovered in a doorway ready to take care of the first cop with a couple of fifties or a single .38, as necessity dictated.

Tony guided my elbow. "Okay, Professor, I think I understand the bit now, but I'll let you run it up with the flagpole for me, to see how it waves to the national anthem."

"Here?" I spluttered once more. "I told you, Carmen, I wanted nothing more to do with you. Your check is still on deposit..."

"You didn't want anything to do with me in the first place." The thug's teeth flashed in the night. "Throw your contraption into gear, buddy."

That was the first time the tone of respect, even if faked, had gone out of his voice. I moved to the switchboard of my invention. What remained was as simple as adjusting a modern floor lamp to a medium light position. I flipped.

Restraining any impulse toward colloqualism, I was also deeply disturbed by what next occurred.

One of the massive square

shapes on the horizon vanished.

"What have you done?" I yelped, ripping the cover off the machine.

Even under the uncertain illumination of the smogged stars I could see that the unit was half gone—in fact, exactly halved.

"Squint the Seal is one of my boys. He used to be a mechanic in the old days for Burger, Madle, the guys who used to rob banks and stuff." There was an unmistakable note of boyish admiration in Carmen's voice. "He figured the thing would work like that. Separate the poles and you increase the size of the working area."

"You mean square the operational field. Your idiot doesn't even know mechanics."

"No, but he knows all about how any kind of machine works."

"You call that working?" I demanded. "Do you realize what you have there, Carmen?"

"Sure. A disintegrator ray, straight out of *Startling Stories.*"

My opinion as to the type of person who followed the pages of science-fiction magazines with fluttering lips and tracing finger was upheld.

I looked at the old warehouse and of course didn't see it.

"What was this a test for?" I asked, fearful of the Frankenstein I had made. "What are you planning to do now?"

"This was no test, Venetti. This was it. I just wiped out Harry Keno and his intimates right in the middle of their confidential squat."

"Good heavens. That's uncouthly old-fashioned of you, Carmen! Why, that's *murder.*"

"Not," Carmen said, "without no *corpus delecti.*"

"The body of the crime remains without the body of the victim," I remembered from my early Ellery Queen training.

"You're talking too much, Professor," Tony suggested. "Remember, *you* did it with *your* machine."

"Yes," I said at length. "And why are we standing here letting those machines sit there?"

There were two small items of interest to me in the Times the following morning.

One two-inch story—barely making page one because of a hole to fill at the bottom of an account of the number of victims of Indian summer heat prostration—told of the incineration of a warehouse on Fleet Street by an ingenious new arson bomb that left "virtually" no trace. (Maybe the fire inspector had planted a few traces to make his explanation more creditable.)

The second item was further over in a science column just off the editorial page. It told of the government—!—

developing a new process of waste disposal rivaling the old Buck Rogers disintegrator ray.

This, I presumed, was one of Tony Carmen's information leaks.

If he hoped to arouse the public into demanding my invention I doubted he would succeed. The public had been told repeatedly of a new radioactive process for preserving food and a painless way of spraying injections through the skin. But they were still stuck with refrigerators and hypodermic needles.

I had forced my way halfway through the paper and the terrible coffee I made when the doorbell rang.

I was hardly surprised when it turned out to be Tony Carmen behind the front door.

He pushed in, slapping a rolled newspaper in his palm. "Action, Professor."

"The district attorney has indicted you?" I asked hopefully.

"He's not even indicted *you*, Venetti. No, I got a feeler on this plant in the *Times*."

I shook my head. "The government will take over the invention, no matter what the public wants."

"The public? Who cares about the public? The Arcivox corporation wants this machine of yours. They have their agents tracing the plant now. They will go from the columnist to his legman to my man and finally to you. Won't be long before they get here. An hour maybe."

"Arcivox makes radios and TV sets. What do they want with the Expendables?"

"Opening up a new appliance line with real innovations. I hear they got a new refrigerator. All open. Just shelves—no doors or sides. They want a revolutionary garbage disposal too."

"Do you own stock in the company? Is that how you know?"

"I own stock in a competitor. That's how I know," Carmen informed me. "Listen, Professor, you can sell to Arcivox and still keep control of the patents through a separate corporation. And I'll give you 49% of its stock."

This was Carmen's idea of a magnanimous offer for my invention. It *was* a pretty good offer—49% and my good health.

"But will the government let Arcivox have the machine for commercial use?"

"The government would let Arcivox have the hydrogen bomb if they found a commercial use for it."

There was a sturdy knock on the door, not a shrill ring of the bell.

"That must be Arcivox now," Carmen growled. "They have the best detectives in the business. You know what to tell them?"

I knew what to tell them.

I peeled off my wet shirt and threw it across the corner of my desk, casting a reproving eye at the pastel air-conditioner in the window. It wasn't really the machine's fault— The water department reported the reservoir too low to run water-cooled systems. It would be a day or two before I could get the gas type into my office.

Miss Brown, my secretary, was getting a good look at my pale, bony chest. Well, for the salary she got, she could stand to look. Of course, she herself was wearing a modest one-strap sun dress, not shorts and halters like some of the girls.

"My," she observed "it certainly is humid for March, isn't it, Professor Venetti?"

I agreed that it was.

She got her pad and pencil ready.

"Wheedling form letter to Better Mousetraps. Where are our royalties for the last quarter of the year? We know we d i d n ' t have a full three months with our Expendable Field in operation on the new traps, but we want the payola for what we have coming.

"Condescending form letter to Humane Lethal Equipment. Absolutely do not send the California penal system any chambers equipped with our patented field until legislature officially approves them. We got away with it in New Mexico, but we're older and wiser now.

"Rush priority telegram to President, United States, any time in the next ten days. Thanks for citation, et cetera. Glad buddy system working out well in training battlefield disintegrator teams.

"Indignant form letter to Arcivox. We do not feel we are properly a co-respondent in your damage suits. Small children and appliances have always been a problem, viz ice boxes and refrigerators. Suggest you put a more complicated latch on the handles of the dangerously inferior doors you have covering our efficient, patented field."

I leaned back and took a breather. There was no getting around it— I just wasn't happy as a business man. I had been counting on being only a figurehead in the Expendable Patent Holding Corporation, but Tony Carmen didn't like office work. And he hadn't anyone he trusted any more than me. Even.

I jerked open a drawer and pulled off a paper towel from the roll I had stolen in the men's room. Scrubbing my chest and neck with it, I smoothed it out and dropped it into the wastebasket. It slid down the tapering sides and through the narrow slot above the Expendable Field. I had redesigned the wastebaskets after a janitor had stepped in one. But Gimpy was happy now, with the $50,000 we paid him.

I opened my mouth and Miss Brown's pencil perked

up its eraser, reflecting her fierce alertness.

Tony Carmen banged open the door, and I closed my mouth.

"G-men on the way here," he blurted and collapsed into a chair opposite Miss Brown.

"Don't revert to type," I warned him. "What kind of G-Men? FBI? FCC? CIA? FDA? USTD?"

"Investigators for the Atomic Energy Commission."

The solemn, conservatively dressed young man in the door touched the edge of his snap-brim hat as he said it.

"Miss Brown, would you mind letting our visitor use your chair?" I asked.

"Not at all, sir," she said dreamily.

"May I suggest," I said "that we might get more business done if you then removed yourself from the chair first."

Miss Brown leaped to her feet with a healthy galvanic response and quit the vicinity with her usual efficiency.

ONCE seated, the AEC man said "I'll get right to the point. You may find this troublesome, gentlemen, but your government intends to comfiscate all of the devices using your so-called Expendable field, and forever bar their manufacture in this country or their importation."

"You stinking G-men aren't getting away with this," Carmen said ingratiatingly. "Ever hear of the Mafia?"

"Not much," the young man admitted earnestly, "since the FBI finished with its deportations a few years back."

I cleared my throat. "I must admit that the destruction of a multi-billion business is disconcerting before lunch. May we ask why you took this step?"

The agent inserted a finger between his collar and tie. "Have you noticed how unseasonably warm it is?"

"I wondered if you had. You're going to have heat prostration if you keep that suit coat on five minutes more."

The young man collapsed back in his chair, loosening the top button of his ivy league jacket, looking from my naked hide to the gossomer scrap of sport shirt Carmen wore. "We have to dress inconspicuously in the service," he panted weakly.

I nodded understandingly. "What does the heat have to do with the outlawing of the Expendables?"

"At first we thought there might be some truth in the folk nonsense that nuclear tests had something to do with raising the mean temperature of the world," the AEC man said. "But our scientists quickly found they weren't to blame."

"Clever of them."

"Yes, they saw that the widespread use of your machines was responsible for the higher temperature. Your de-

vice violates the law of conservation of energy, *seemingly*. It *seemingly* destroys matter without creating energy. Actually—"

He paused dramatically.

"Actually, your device added the energy it created in destroying matter to the energy potential of the planet in the form of *heat*. You see what that means? If your devices continue in operation, the mean temperature of Earth will rise to the point where we burst into flame. They must be outlawed!"

"I agree," I said reluctantly.

Tony Carmen spoke up. "No, you don't, Professor. We don't agree to that."

I waved his protests aside.

"I *would* agree," I said, "except that it wouldn't work. Explain the danger to the public, let them feel the heat rise themselves, and they will hoard Expendables against seizure and continue to use them, until we do burst into flame, as you put it so religiously."

"Why?" the young man demanded.

"Because Expendables are convenient. There is a ban on frivolous use of water due to the dire need. But the police still have to go stop people from watering lawns, and I suspect not a few swimming pools are being filled on the sly. Water is somebody else's worry. So will be generating enough heat to turn Eden into Hell."

"Mass psychology isn't my strongest point," the young man said worriedly. "But I suspect you may be right. Then—we'll be damned?"

"No, not necessarily," I told him comfortingly. "All we have to do is *use up* the excess energy with engines of a specific design."

"But can we design those engines in time?" the young man wondered with uncharacteristic gloom.

"Certainly," I said, practising the power of positive thinking. "Now that your world-wide testing laboratories have confirmed a vague fear of mine, I can easily reverse the field of the Expendable device and create a rather low-efficiency engine that consumes the excess energy in our planetary potential."

THE agent of the AEC whose name I can never remember was present along with Tony Carmen the night my assistants finished with the work I had outlined.

While it was midnight outside, the fluorescents made the scene more visible than sunlight. My Disexpendable was a medium-sized drum in a tripod frame with an unturned coolie's hat at the bottom.

Breathlessly, I closed the switch and the scooped disc began slowly to revolve.

"Is it my imagination," the agent asked, "or is it getting cooler in here?"

"Professor." Carmen gave me a warning nudge.

There was now something on the revolving disc. It was a bar of some shiny gray metal.

"Kill the power, Professor," Carmen said.

"Can it be," I wondered, "that the machine is somehow recreating or drawing back the processed material from some other time or dimension?"

"Shut the thing off, Venetti!" the racketeer demanded.

But too late.

There was now a somewhat dead man sitting in the saddle of the turning circle of metal.

If Harry Keno had only been sane when he turned up on that merry-go-round in Boston I feel we would have learned much of immense value on the nature of time and space.

As it is, I feel that it is a miscarriage of justice to hold me in connection with the murders I am sure Tony Carmen did commit.

I hope this personal account when published will end the vicious story supported by the district attorney that it was I who sought Tony Carmen out and offered to dispose of his enemies and that I sought his financial backing for the exploitation of my invention.

This is the true, and only true, account of the development of the machine known as the Expendable.

I am only sorry, now that the temperature has been standardized once more, that the Expendable's antithesis, the Disexpendable, is of too low an order of efficiency to be of much value as a power source in these days of nuclear and solar energy. So the world is again stuck with the problem of waste disposal... including all that I dumped before. But as a great American once said, you can't win 'em all.

If you so desire, you may send your generous and fruitful letters towards my upcoming defense in care of this civic-minded publication.

END

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HUE AND CRY

The place where reader and editor meet . . .

Dear Editor:

The cover of the March issue was very well drawn and has greatly improved. As you promised, the interior art was a good deal better than earlier issues. Keep working on it and IF's quality will continue rising.

Anderson's story was good, although not among his best. Let's have more of him. Enjoyed *E Being* bit, even though it was a little wild. How about some stories from Sturgeon?

Overall, March issue was superb. Keep up the good work!

Winfred Anderson
Springfield, Tennessee

P.S. In the cover picture the piece of wreckage seems to be painted red. My question is, how come the paint doesn't burn off from friction when the ship enters the atmosphere?

* Simple. It does burn off. Repainting it every time is how they keep the spacemen busy.—*Editor.*

Dear Editor:

The cover illustration for *Kings Who Die* in the tenth anniversary issue was a masterpiece as was the story itself.

Am enjoying very much the series of stories about Retief and hope they continue to be as good as they have been so far.

1962 looks like a good year for IF!

David Charles Paskow
Philadelphia, Pennsylvania

Dear Sir:

IF of March, 1962, *Happy Homicide,* p. 82, records the fallacy (such even in a futuristic setup) that brain tissue, dead longer than five minutes, still contains mind vibrations traceable by a super-dooper encephalogram. If brain and mind be identical, then violin and violinist are interchangeable as well. Even fiddler Albert Einstein thought so, leaving his erstwhile brain to science. Did the microtome locate his genius? General tenor of IF ingenious, plausible, well edited, facetious fiddlesticks at minimum, genuine merit. Candid editorial excellent. Four-dimensional wisdom unknowable to us 3-dimensional clucks. Will convey info if anything fulminant crosses my horizon. Psionics inconstant undeveloped toy. All the best to you, yours, etc.

E. M. Smola
New York City

Dear Editors—who*ever* you are:

It's been many years (more than I care to remember) since I sat down last and hacked out a letter to a pro-editor. Even so, I was surprised to see Ken Winkes's letter in your January issue; I have always been under the impression that a letter column was supposed to be for just the purpose that he suggests—discussion, argument, (you should forgive the expression) hue and cry. Or have letter columns changed that much in the last ten years?

I wonder if Ken Winkes remembers the letter columns of the old *Thrilling Wonder Stories, Startling Stories* (under Sam Merwin and Sam Mines) and *Planet Stories* (under Robert Lowndes). I suppose all of us in those days had, to a certain degree, the so-called "sense of wonder." But such l e t t e r columns—eight, ten pages long—those were the days when professional authors were regular contributors, and the d i s c u s s i o n ranged from new findings of Sumerian artifacts in the Iranian desert to the latest developments in rocket fuels. Now, the Sumerian artifacts have withdrawn to the museums and the artificial satellites are circling the Earth by the dozen. Sometimes I think the guy was right who said that familiarity breeds contempt.

Of course the inevitable happened. B e t w e e n rising costs of magazine publishing and waning interest on the part of the letter writers, the forum-type letter column was doomed to extinction; and in my mind at least, now occupies the same portion of the imagination usually reserved for particularly idyllic memories.

Since Ken asks, suppose we

try a definition of this term "sense of wonder" (even though it's rather like trying to define "time.") My dictionary defines "wonder" as: "...thing or event that causes astonishment and admiration ...feeling of surprise...and awe aroused by something strange...unexpected, incredible; to have doubt mingled with curiosity." And: "Sense; the ability of the nerves and brain to receive and react to stimuli."

"Sense of wonder: The brain reaction to a set of stimuli which inspire awe, astonishment, admiration, surprise; to be inspired by these stimuli to doubt (no doubt mixed with curiosity); astonishment and unexpected incredulity; the whole thing being a function of a vivid imagination."

It's a tenuous thing, this "sense of wonder." To have one, you must have imagination. In fact, a sense of wonder and imagination are two hairs of the same dog—you might say, two sides of the same hair. It is not something limited to a reading and appreciation of science fiction. Imagination opens the lock on any door, shows the way to the solving of any problem. It is just that, to many people, science fiction is a whole new set of doors. Before 1957, one of these doors opened to the regions of near space. Now that sputniks and satellites are shooting about all over up there, the frontier has all but vanished. It is "explored" territory. Near space has attained the status of the "Old West" during the early years of this century—almost all explored, filled with dust, weather and hundreds of people just trying to live there, never mind how wonderful it is.

Someone said not too long ago that once men have gone to the moon there will be another frontier gone—after all, what enjoyment is there in reading a story about a trip across country in a car? Many stories were written about that very thing, years ago. Now cross-country trips are a matter of course.

Imagination—the "sense of wonder"—hasn't vanished and it never will. But with each stride forward of science, a portion of what was once alive only in the imagination becomes hard living fact. You don't have to use your imagination to deal with it...at least with the basic parts of it.

But for every problem solved there are a hundred new ones. It is impossible for Man to become bored with everything—at least, not for a few hundred thousand years.

A dying gasp from,
Ray Thompson
Norfolk, Nebraska

P.S. SAVE YOUR CONFEDERATE FANZINES, BOYS. ECLIPSE SHALL RISE AGAIN!

* Bob Lowndes, one of the oldest and best friends of

"whoever you are", ably edited many a magazine, but *Planet Stories* wasn't one of them. Mal Reiss, Jerry Bixby, Paul Fairman, Scott Peacock were a few of *Planet's* eminent helmsmen.

But with the rest of what you say we agree! Science fiction doesn't suffer because science moves along. There are always new frontiers—always new discoveries—always new things to look at through the illuminating mirror that our writers hold up for us.
—*Editor.*

Dear Mr. Sturgeon:

I send this along to you for several reasons. 1: Readers seldom influence the format of publishing policy of a magazine—only its life or death. 2: As a feature editor you can think about and discuss many things an editor must reject.

Over Labor Day I attended the Sci-Fic Convention here in Seattle. I was pleased with the convention—but the one factor that disturbed me was the percentage of middle-age and past m i d d l e-aged to youth. Lots of young people—to be sure—but not nearly enough.

Again, the high per cent of the youth that fell into the "screwball" or "fad" division. Fads are soon dropped as people mature. Will they drop s.f. as well? I think so.

I have been working for Boeing Airplane Company the past couple of years, and I have been working on advance planning on Dyna-Soar III. Wandering about in 1966 and doing much of what I used to dream of doing when I was in high school *and* finally got the training to do. The thing I have noted (has been noted elsewhere) is the lack of interest among our younger employees in the actual project—aside from pay day.

What is the problem? Well, I think it has been the loss of "bridge material" in s.f. The loss of space opera has been lauded in some areas—but kids that have been raised on Matt Dillon and "The Untouchables" have a tough time transferring their interest to the advanced pages of *Analog* or *Galaxy*. IF does pop up with some but—only once in a while.

Let them find their way to the advanced social and technical S-F through plain old space opera!

Fred Crisman
Tacoma, Washington

* 1: We were at Seattle too, and noticed the lack of younger fans, relatively speaking. Heard a very logical explanation, though. Seattle being very far from usual fannish hangouts, only the more solvent—which is generally to say, the older—fans could scrape up the carfare. 2: IF tries real hard to bring *good* "space opera" to its readers. We like it too. The hard part is convincing the writers to write it for us. 3: A boon, fel-

lows! Please don't address your letters to Our Bearded Feature Editor, or the art director, or the publisher. This involves us either in forwarding mail back and forth—which takes time and lets some of it get lost, we fear—or in opening Our Bearded Feature Editor's personal mail from old loves, ardent fans and long-lost relatives—which involves us in angry reproaches. Just: "Hue & Cry, c/o IF" will do fine. At great expense to ourselves we employ a large secretarial staff—or anyway, a staff composed of 1 large secretary—to sort things out. Trust her!

—*Editor.*

Dear Editor:

Okay, okay, you've put the "Worlds of" back in the title were it belonged, but how do you read it now? "IF—Worlds of Science Fiction" or "Worlds of IF— Science Fiction"? The former is the original title and by far the best one. Will be eagerly awaiting your answer, since I bind my copies by myself and don't know which of the titles to put on the spine of the magazine.

Congrats on the new cover and spine logos; they look much better in the bookcase. But what's the big idea, using just one metallic clip, or whatever you call it? Does this really cut costs, or is this just plain avarice?

There used to be occasional (and very good too, I might add) anthologies, of which the last one was *The Second World of If.* Why couldn't you continue the series? I'm sure the readers would receive them back enthusiastically. Also, why not have Ted Sturgeon review some books each issue? A book review feature is very necessary to a magazine. And, while you're at it, get somebody to write science articles, eight to ten pages long, not those skimpy news items Sturgeon is forced to do; *Scientific American* does them much better. By the way, I am also entirely in favor of a 3-4 page editorial and some 6 pages of letters. Come now, it isn't very much, is it?

Alexander Yudenitch
San Paulo, Brazil

* Re avarice: We're trying to do something about that now, though it pains our greedy soul to part with the price of an extra staple. (That's a joke. The problem is actually more complicated—but we are working on it.) Re "Science News Briefs": Okay, we've killed them. Like this month's Sturgeon science article better? Re anthologies: We're working on that, too. Let you know more about it soon.—*Editor.*

By the way, you letter-writers—take a look at *The Other IF* in this issue before you sit down to a typewriter again. Might give you something fresh to think about! **END**

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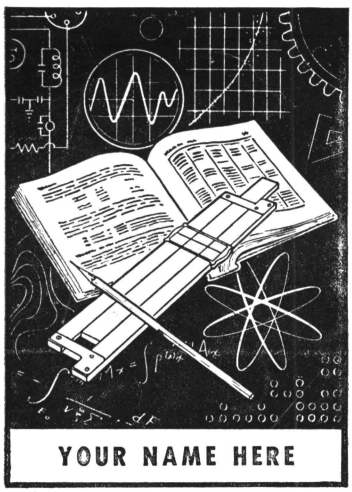

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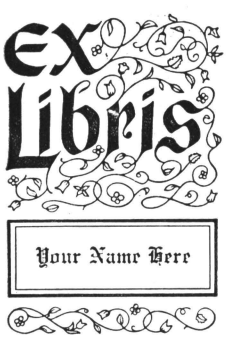

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