

science briefs

WHEN you come right down to it, there are only two things to be done about the deadly unwanted by- products of the atomic age—seal them off somehow, or learn to live with them. The Atomic Energy Commission likes the policy of burying atomic wastes underground, in carefully selected sites where it can be ascertained that there will be no low-level water tables or other opportunity for "leakage". In spite of the fact that any atomic facility produces vast amounts of "hot" waste, a surprisingly large amount of it can be disposed of in a small space. For example, all the low-intensity wastes of Oak Ridge have been buried in a 60-acre area. Commission experts calculate that one 2- to 300 acre site would be enough to bury all the wastes produced in the northwest for the next 20 vears. As to airborne radioactivity-well, ways have to be found to live with it. One way is indicated by experiments at Georgia Tech, who have been able to cut the radioactive cesium content of milk by feeding cows on grass grown indoors, not in soil but in hydroponic tanks. The cut. measured against a control group of outdoor-pastured cows. was dramatic - about 38%.

Next time you hear anyone talking about modern miracle fabrics, spring this one on them: a new material is woven from small-diameter wire made of cobalt-chromium and nickel-chromium alloys. It is then run up — but not on Grandma's sewing machine — into re-entry parachutes for use, ultimately, in the recovery of manned satellites.

Thirsty? Well, stick around. You may be a good deal thirstier before too long. Freshwater demand will exceed natural supply by 85 billion gallons a day within the next 20 years.

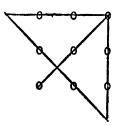
The real weird-o of the elemental table, helium, is about as snobbish as an element can get. It can't explode or burn or react with anything or combine with anything. This makes it handy if you have an original copy of the Declaration of Independence around and would like to keep it a while. Or if you are a welder and would like your arc to work in an atmosphere wherein nothing will dirty up the metal with oxides. END

Kangaroo Quiz

Here's the solution to the problem on page 66. Bar bettors and bubblebrains may drop out at this point; others may want to know what the act of solving this one means.

If you solved the nine-dot puzzle, you are almost certainly a highly creative person. Most people are not, and if you couldn't, you may comfort yourself with this further proof of your membership in the vast majority.

This test was used as a demonstration in a recent seminar at the East Pittsburgh plant of Westinghouse: subject, creative engineering, or, what makes the bright ideas come, and to whom? One thing common to most highly



creative minds, according to the Westinghouse scientists, is the refusal to accept any limitations except those exactly stated.

Most people, when presented with the nine-dot puzzle, fail to solve it because they assume that they must stay within the pattern of dots, or that they must not cross any lines.

What's your excuse?

THE JUNKMAKERS

BY ALBERT TEICHNER

ERIC WAS THE BEST ROBOT THEY'D EVER HAD

— PERFECTLY TRAINED, EVER THOUGHTFUL,

A JOY TO OWN. NATURALLY THEY

HAD TO DESTROY HIM!

1

WENDELL HART had drifted, rather than plunged, into the underground movement. Later, discussing it with other members of the Savers' Conspiracy, he found they had experienced the same slow, almost casual awakening. His own, though, had come at a more appropriate time, just a few weeks before the Great Ritual Sacrifice.

The Sacrifice took place only once a decade, on High

Holy Day at dawn of the spring equinox. For days prior to it joyous throngs of workers helped assemble old vehicles, machine tools and computers in the public squares, crowning each pile with used. disconnected robots. In the evening of the Day they proudly made their private heaps on the neat green lawns of their homes. These traditionally consisted of household utensils, electric heaters, air conditioners and the familv servant.

The wealthiest—considered particularly blessed—even had two or three automatic servants beyond the public contribution, which they destroyed in private. Their more average neighbors crowded into their gardens for the awesome festivities. The next morning everyone could return to work, renewed by the knowledge that the Festival of Acute Shortages would be with them for months.

Like everyone else, Wendell had felt his sluggish pulse gaining new life as the time

drew nearer.

A cybernetics engineer and machine tender, he was down to ten hours a week of work. Many others in the luxurygorged economy had even smaller shares of the purposeful activities that remained. At night he dreamed of the slagger moving from house to house as it burned, melted and then evaporated each group of junked labor-blocking devices. He even had glorious daydreams about it. Walking down the park side of his home block, he was liable to lose all contact with the outside world and peer through the mind's eve alone at the climactic destruction.

Why, he sometimes wondered, are all these things so necessary to our resurrection?

Marie had the right answer for him, the one she had learned by rote in early childhood: "All life moves in cycles. Creation and progress must be preceded by destruction. In ancient times that meant we had to destroy each other; but for the past century our inherent need for negative moments has been sublimated—that's the word the news broadcasts use—into proper destruction." His wife smiled. "I'm only giving the moral reason, of course. The practical one's obvious."

Obvious it was, he had to concede. Men needed to work, not out of economic necessity any more but for the sake of work itself. Still a man had

to wonder . . .

HE had begun to visit the Public Library Archives, poring over musty references that always led to maddeningly frustrating dead ends. For the past century nothing really informative seemed to have been written on the subject.

"You must have government authorization," the librarian explained when he asked for older references. Which, naturally, made him add a little suspicion to his already large

dose of wonder.

"You're tampering with something dangerous," Marie warned. "It would make more sense for you to take longsleep pills until the work cycle picks up."

"I will get to see those early references." he said through

clenched teeth.

He did.

All he had needed to say at the library was that his work in sociology required investigation of some twentieth century files. The librarian, a tall. gaunt man, had given him a speculative glance. "Of course, you don't have government clearance . . . But we get so few inquiries in sociology that I'm willing to offer a little encouragement." He sighed. "Don't get many inquiries altogether. Most people just can't stand reading. You might be interested to know this one of the best headings to research in sociology is Conspicuous consumption."

Then it was Wendell's turn to glance speculatively. The older man, around a healthy hundred and twenty-five, had a look of earnest dedication about him that commanded respect as well as confidence.

"Conspicuous consumption? An odd combination of words. Never heard of that before. I will look it up."

The librarian was nervous as he led his visitor into a reference booth. "That's about all the help I can offer. If anything comes up, just ring for me. Burnett's the name. Uh—you won't mention I put you on the file without authorization, I hope."

"Certainly not."

As soon as he was alone he typed Conspicuous consumption into the query machine.

It started grinding out long bibliographical sheets as well as cross-references to Obsolescence, Natural; Obsolescence, Technological; Obsolescence, Planned, plus even odder items such as Waste-making, Art of and Production, Stimulated velocity of. How did such disparate subjects tie in with each other?

BY the end of the afternoon he began to see, if only dimly, to what the unending stream of words on the viewer pointed.

For centuries ruling classes had made a habit of conspicuously wasting goods and services that were necessities for the mass of men. It was the final and highest symbol of social power. By the time of Louis XIV the phenomenon had reached its first peak. The second came in the twentieth century when mass production permitted millions to devote their lives to the acquisition and waste of non-essentials. Hart's twenty-second century sensibliities were repelled by the examples given. He shuddered at the thought of such anti-social behavior.

But a parallel development was more appealingly positive in its implications. As the technological revolution speeded up, devices were superseded as soon as produced. The whole last half of the 1900's was filled with instances where the drawing board kept outstripping the assembly line.

Hart remembered this last change from early school days but the later, final development was completely new and shocking to him. Advertising had pressured more and more people to replace goods before they wore out with other goods that were, essentially, no improvement on their predecessors! Eventually just the word "NEW" was enough to trigger buying panics.

There had been growing awareness of what was happening, even sporadic resistance to it by such varied ideologies as Conservative Thrift, Asocial Beatnikism and Radical Inquiry. But, strangely enough, very few people had cared. Indeed, anything that diminished consumption was viewed as dangerously subversive.

"And rightly so!" was his first, instinctive reaction. His second, reasoned one, though,

was less certain.

The contradiction started to give him a headache. He hurried from the scanning room, overtaxed eyes blinking at the rediscovery of daylight.

Burnett walked him to the door. "Not feeling well?" he

inquired.

"I'll be all right. I just need a few days real work." He stopped. "No, that's not why. I'm confused. I've been reading crazy things about obsolescence. They used to have strange reasons for it. Why, some people even said replace-

ments were not always improvements and were unnecessary!"

Burnett could not completely hide his pleasure. "You've been getting into rather deep stuff."

"Deep — or nonsensical!"
"True. True. Come back to-

morrow and read some more."
"Maybe I will." But he was
happy to get away from the

library building.

Marie was horrified when he told her that evening about his studies. "Don't go back there," she pleaded. "It's dangerous. It's subversive! How could people say such awful things? You remember that Mr. Johnson around the corner? He seemed such a nice man, too, until they arrested him without giving a reason ... and how messed up he was when he got out last year. I'll bet that kind of talk explains the whole thing. It's crazy. Everyone knows items start wearing out and they have to be replaced."

"I realise that, honey, but it's interesting to speculate. Don't we have guaranteed

freedom of thought?"

She threw up her hands as if dealing with a child. "Naturally we have freedom of thought. But you should have the right thoughts, shouldn't you? Wendell, promise me you won't go back to that library."

"Well —"

"Reading's a very risky thing anyway." Her eyes were saucer-round with fright. "Please, darling. Promise."

"Sure, you're right, honey. I promise."

HE meant it when he said it. But that night, tossing from side to side, he felt less certain. In the morning, as he went out, Marie asked him where he was going.

"I want to observe the preparations for the Preliminary

Rites."

"Now that," she grinned, "is what I call healthy think-

ing."

For a while he did stand around the Central Plaza along with thousands of other idlers, watching the robot dump trucks assemble the piles of discarded equipment. The crowd cheered loudly as an enormous crane was knocked over on its side.

"There's fifty millions worth out there!" a bystander exulted. "It's going to be the biggest Preliminary I've ever seen."

"It certainly will be!" he said, catching a little of the other man's enthusiasm despite his previous doubts.

Preliminary Rites were part of the emotion-stoking that preceded the Highest Holy Day. Each Rite was greater and more destructive than those that had gone before. As tokens of happy loyalty, viewers threw hats and watches and stickpins onto the pile just prior to the entry

of the slaggers. What better way could be found for each man to manifest his common humanity?

After a while doubt started assailing him again, and Hart found himself returning almost against his will to the Library Building. Burnett greeted him cordially. "Today's visit is completely legal," he said. "Anyone doing olden time research is automatically authorized if he has been here before."

"I hope my thought can be as legal," Hart blurted out. "Well—that was just a joke."

"Oh, I can recognize a joke when I hear one, my friend."

Hart went to his booth, feeling the man's eyes measuring him more intently than ever. It was almost a welcome relief to start reading the reference scanner once more.

But not for long. As the wider pattern unfolded, his anxiety state intensified.

It was becoming perfectly obvious that many, many replacements used to be made long before they were needed. And it was still true. I should not be thinking such thoughts, he told himself, I should be outside in the Plaza, being normal and human.

But he could see how it had come about, step by step. First there had been pressure from the ruling echelons, many of whose members only maintained their status through excessive production. Then,

much more important, there had been the willful blindness of the masses who wanted to keep their cozy, familiar treadmills going.

He slammed down the off button and went out to the librarian's desk. "Do people want to work all the time," he said, "for the sake of work alone?"

He immediately regretted the question. But Burnett did not seem to mind. "You've only stated the positive reason, Mr. Hart. The negative one could be stronger — the fear of what they would have to do if they did not have to work much over a long period."

"What would it mean?"

"Why, they would have to start thinking! Most people don't mind thought if it's concentrated in a narrow range. But if they have to think in a broad range to keep boredom away — no, that's too high a price for most of them! They avoid it when they can. And under present circumstances they can." He stopped. "Of course that's a purely hypothetical fiction I'm constructing."

Hart shook his head. "It sounds awfully real to be purely—" He, too caught himself up. "Of course, you're only positing a fiction."

Burnett started putting his desk papers away. "I'm leaving now. The Preliminary begins soon. Want to come?"

The man's face was stolidly blank except for his brown eyes which burned like a zealot's. Fascinated by them, Hart agreed. It would be best to return anyway. Some of the bystanders had looked too curiously at him when he had left. Who would willingly leave a Rite when it was approaching its climax?

II

THE Plaza was now thronged and the sacrificial pile towered over a hundred feet in the cleared center area. Then, as the first collective Ah! arose, a giant slagger lumbered in from the east, the direction prescribed for such commencements. Long polarity arms glided smoothly out of the central mechanism and reached the length for Total Destruction.

"That's the automatic setting," parents explained to

their children.

"When?" the children demanded eagerly.

"Any moment now."

Then the unforeseen occurred.

There was a rumbling from inside the pile and a huge jagged patchwork of metal shot out, smashing both arms. The slagger teetered, swaying more and more violently from side to side until it collapsed on its side. The rumbling grew. And then the pile, like a mechanical cancer, ripped

the slagger apart and then absorbed it.

The panicking crowd fell back. Somewhere a child began crying, provoking more hubbub. "Sabotage!" people were crying. "Let's get away!"

Nothing like this had ever happened before. But Hart knew instantly what had caused it. Some high-level servo mechanisms had not been thoroughly disconnected. They had repaired their damages, then imposed their patterns on the material at hand.

A second slagger came rushing into the square. It discharged immediately; and the pile finally collapsed and disintegrated as it was supposed to.

The crowd was too shocked to feel the triumph it had come for, but Hart could not share their horror. Burnett eved him. "Better look indignant," he said. "They'll be out for blood. Somebody must have sabotaged the setup."

"Catch the culprits!" shouted, joining the crowd around him. "Stop anti-social

acts!"

"Stop anti-social acts!" roared Burnett; and, in a whisper: "Hart, let's get out of here."

As they pushed their way through the milling crowd, a loudspeaker boomed out: "Return home in peace. The instincts of the people are good. Healthy destruction forever! The criminals will be tracked down . . . if they exist." "A terrible thing, friend,"

a woman said to them.

"Terrible, friend," Burnett agreed. "Smash the anti-social elements without mercy!"

Three children were clustered together, crying. "I wanted to set the right example for them." said the father to anyone who would listen. "Thev'll never get over this!"

Hart tried to console them. "Next week is High Holy Day," he said, but the bawling only increased.

The two men finally reached a side avenue where the crowd was thinner. "Come with me," Burnett ordered, "I want you to meet some people."

HE sounded as if he were instituting military discipline but Hart, still dazed, willingly followed. "It wasn't such a terrible thing," he said, listening to the distant uproar. "Why don't they shut up!"

"They will — eventually." Burnett marched straight ahead and looked fixedly in the same direction.

"The thing could have gobbled up the city if there hadn't been a second slagger!" said

a lone passerby.

"Nonsense." Burnett muttered under his breath. "You know that. Hart. Any selfregulating mechanism reaches a check limit sooner than that."

"It has to."

They turned into a large building and went up to the fiftieth floor, "My apartment," said Burnett as he opened the door.

There were about fifteen people in the large living room. They rose, smiling, to greet their host. "Let's save the self-congratulations for later," snapped Burnett. "These were merely our own preliminaries. We're not out of the woods yet. This, ladies and gentlemen, is our newest recruit. He has seen the light. I have fed him basic data and I'm sure we're not making a mistake with him."

Hart was about to demand what was going on when a short man with eyes as intense as Burnett's proposed a toast to "the fiasco in the Plaza." Everyone joined in and he did not have to ask.

"Burnett, I don't quite understand why I am here but aren't you taking a chance

with me?"

"Not at all. I've followed your reactions since your first visit to the library. Others here have also — when you were completely unaware of being observed. The gradual shift in viewpoint is familiar to us. We've all been through it. The really important point is that you no longer like the kind of world into which you were born."

"That's true, but no one can change it."

"We are changing it, said

a thin-faced young woman. "I work in a servo lab and—."

"Miss Wright, time enough for that later," interrupted Burnett. "What we must know now, Mr. Hart, is how much you're willing to do for your new-found convictions? It will be more work than you've ever dreamed possible."

He felt as exhilarated as he did in the months after High Holy Day. "I'm down to under ten hours labor a week. I'd do anything for your group if I

could get more work."

Burnett gave him a hearty handshake of congratulation... but was frowning as he did so. "You're doing the right thing — for the wrong reason. Every member of this group could tell you why. Miss Wright, since you feel like talking, explain the matter."

"Certainly. Mr. Hart, we are eng ged in an activity of so-called subversion for a positive reason, not merely to avoid insufficient work load. Your reason shows you are still being moved by the values that you despise. We want to cut the work-production load on people. We want them to face the problem of leisure, not flee it."

"There's a heart-warming paradox here," Burnett explained. "Every excess eventually undermines itself. Everybody in the movement starts by wanting to act for their beliefs because work appears so attractive for its own

sake. I was that way, too, until I studied the dead art of

philosophy."

"Well —" Hart sat down, deeply troubled. "Look, I deplore destroying equipment that is still perfectly useful as much as any of you do. But there is a problem. If the destruction were stopped there would be so much leisure people would rot from boredom."

BURNETT pounced eagerly on the argument. "Instead they're rotting from artificial work. Boredom is a temporary, if recurring phenomenon of living, not a permanent one. If most men face the difficulty of empty time long enough they find new problems with which to fill that time. That's where philosophy showed me the way. None of its fundamental mysteries can ever be solved but, as you pit yourself against them, your experience and capacity for being alive grows."

"Very nice," Hart grinned, "wanting all men to be philosophers. They never have

been."

"You shouldn't have brought him here," growled the short man. "He's not one of us. Now we have a real mess."

"Johnson, I'm leader of this group!" Burnett exploded. "Credit me with a little understanding. All right, Hart, what you say is true. But why? Because most men have

always worked too hard to achieve the fruits of curiosity."

"I hate to keep being a spoil-sport, but what does that prove? Some men who had to work as hard as the rest have been interested in things beyond the end of their nose."

They all groaned their dis-

approval.

"A good point, Hart, but it doesn't prove what you think. It just shows that a minority enjoy innate capacities and environmental variations that make the transition to philosopher easier."

"And you haven't proven anything about the incurious

majority."

"This does, though: whenever there was a favorable period the majority who could, as you put it, see beyond the ends of their noses increased. Our era is just the opposite. We are trapped in a vicious circle. Those noses are usually so close to the grindstone that men are afraid to raise their heads. We are breaking that circle!"

"It's a terribly important thing to aim for, Burnett, but
—" He brought up another doubt and somebody else answered it immediately.

For the next half hour, as one uncertainty was expressed after another, everybody joined in the answers until inexorable logic forced his surrender.

"All right," he conceded, "I

will do anything I can — not to make work for myself, but to help mankind rise above it."

EXCEPT for a brief, triumphant glance in Johnson's direction, Burnett gave no further attention to what had happened and plunged immediately into practical matters.

To halt the blind worship of work, the Rites had first to be discredited. And to discredit the Rites, the awe inspired by their infallible performance had to be weakened. The sabotage of the Preliminary had been the first local step in that direction. There had been a few similar, if smaller, episodes, executed by other groups, but they had received as little publicity as possible.

"Johnson, you pulled one so big this time that they can't hide it. Twenty thousand witnesses! When it comes to getting things done you're the

best we have!"

The little man grinned. "But you're the one who knows how to pick recruits and organize our concepts. This is how it worked. I re-fed the emptied cryotron memory box of a robot discard with patterns to deal with anything it was likely to encounter in a destruction pile. I kept the absolute-freeze mechanism in working order, but developed a shield that would hide its activity from the best pile detector." He spread a large tissue sche-

matic out on the floor and they all gathered around it to study the details. "Now, the important thing was to have an external element that could resume contact with a wider circuit, which could in turn start meshing with the whole robot mechanism and then through that mechanism into the pile. This little lever made the con-

tact at a pre-fed time."

Miss Wright was enthusiastic. "That contact is half the size of any I've been able to make. It's crucially important," she added to Hart. "A large contact can look sus-

picious."

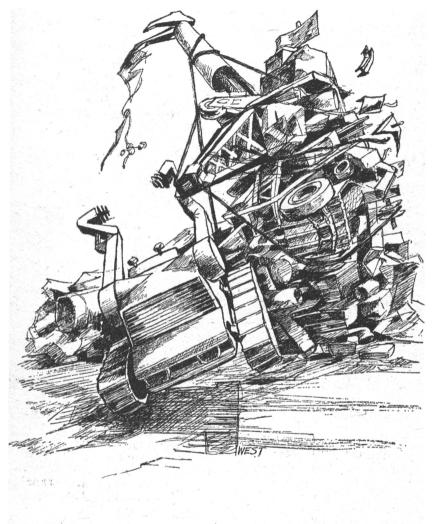
While others took miniphotos of the schematic, Hart studied the contact carefully. "I think I can reduce its size by another fifty per cent. Alloys are one of my specialties — when I get a chance to work at them."

"That would be ideal," said Burnett. "Then we could set up many more discarded robots without risk. How long

will it take?"

"I can rough it out right now." He scribbled down the necessary formulas and everyone photographed that too.

"Maximum security is now in effect," announced Burnett. "You will destroy your copies as soon as you have transferred them to edible base copies. At the first hint of danger you will consume them. Use home enlargers for study. In no case are you to



make permanent blowups that would be difficult to destroy quickly." He considered them sternly. "Remember, you are running a great risk. You're not only opposing the will of the state but the present will of the vast majority of citizens."

"If there are as many other underground groups as you indicate," said Hart, "they should have this information."

"We get it to them," answered Burnett. "I'm going on health leave from my job."

"And what will be your excuse?" Wright demanded anxiously.

"Nervous shock," smiled their leader. "After all, I did see today's events in the Plaza."

WHEN Hart reached home his wife was waiting for him. "Why did you take so long, Wendell. I was worried sick. The radio says anti-socials are turning wild servos loose. How could human beings do such a thing?"

"I was there. I saw it all happen." He frowned. "The crowd was so dense I couldn't

get away."

"But what happened? The ways the news was broadcast I couldn't understand anything."

He described the situation in great detail and awaited Marie's reaction. It was even more encouraging than he had hoped for. "I understand less than before! How could anything reactivate that rubble? They put everything over five years old into the piles, and the stuff's supposed to be decrepit already. You'd almost think we were destroying wealth before its time, because if those disabled mechanisms reactivate—" She came to a dead halt. "That's madness! Oh, I wish High Holy Day were here already so I could get back to work and stop this empty thinking!"

Her honest face was more painfully distorted than he had ever seen it before, even during the universal pre-Rite doldrums. "Only a few more days to go," he consoled. "Don't worry, honey. Everything's going to be all right. Now I'd like to be alone in the study for a while. I've been through an exhausting time."

"Aren't you going to eat?"
The last word triggered the entry of Eric, the domestic robot, pushing the dinner cart ahead of him. "No food tonight," Hart insisted. The shining metal head nodded its assent and the cart was wheeled out.

"That's not a very humane thing to do," she scolded. "Eric's not going to be serving many more meals —"

"Good grief, Marie, just leave me alone for a while, will you?" He slammed the study door shut, warning himself to display less nervousness in the future as he listened to her pacing outside. Then she went away.

The projector gave him a good-sized wall image to consider. He spent most of the night calculating where he could place tiny self-activators in the "obsolescent" robots that were to be donated by his plant. Then he set up the instruction tapes to make the miniature contacts. Production then would be a simple job, only taking a few minutes, and during a working day there were always many periods longer than that when he was alone on the production floor.

But thinking the matter out without computers was much more difficult. Human beings ordinarily filled their time on a lower abstracting level.

When he unlocked the study door in the morning he was startled to see Marie bustling down the corridor, pushing the food service cart herself. That did not make sense, especially considering last night's statement about Eric.

"I thought you'd want breakfast early," she coughed.

"You didn't have to bother, honey. Eric could have done it."

If she had been prying, the cart might have been a prop to take up as soon as he came out. On the other hand, what could she in her technical ignorance make of such matters anyway?

It was best not to rouse any deeper suspicions by openly noticing her wifely nosiness. At breakfast they pretended nothing had happened, devoting the time to mutually disapproved cousins, but all day long he kept wondering wheth long he kept wondering whether ignorant knowledge couldn't be as dangerous as the knowing kind.

THE next morning, after a long sleep, he went to the factory for the first of his semi-weekly work periods.

He sat before a huge console, surveying scores of dials, at the end of a machine that was over five hundred yards long. Today it was turning out glass paper the color of watered blood, made only for Ritual publications, packing it in sheets and dispatching them in automatic trucks: but the machine could be adjusted to everything from metal sheeting to plastic felts. At the far end sat another man, diminished by distance, busily tending more dials that could really take care of themselves.

After a while the man went out for a break. Hart ran a hundred yards to a section that was not working. He snapped it into the alloy supply and fed in the tape. In a minute, several dozen tiny contacts came down a chute. He pocketed them and disconnected the section just before his fellow worker reappeared.

The man walked down the floor to him, looking curious.

"Anything the matter?" he asked hopeful for some break in routine.

"No. just felt like a walk."

"Know what you mean — I feel restless too. Too bad this plant's only two years old. Boy, wouldn't she make a great disintegration!" He grinned, slapping a fender affectionately.

Hart joined in the joke. "Gives us something to look forward to in ten years."

"A good way to look at things." said the other man.

At home he locked the contacts in a desk drawer. Tomorrow he would deliver most of them to Burnett's apartment.

But the next morning an emergency letter came from his group leader, warning him not to appear there. I am going completely underground. I think they may suspect my activities. The dispersion plan must go into effect. You know how to reach Johnson and Wright and they each in turn can get to two others. Good buck!

He had just put the letter in his pocket when Eric announced the arrival of a Rituals Inspector.

The man had nervous closeset eyes and seemed embarrassed by his need to make such a visit. Hart took the offensive as his best defense. "I don't understand this, Inspector," he protested. "You people should be busy with High Holy preparations. Are you losing your taste for work?"

"Now. now, Mr. Hart, that's a very unkind remark. I dislike this nonsense as much as anyone." His square jaw chewed into each word as he opened his scanning box. "It's the anti-social sabotage."

"Do you mean to say I am under suspicion?" Marie was now loitering in the doorway. worse luck.

"Oh, no. Nothing so insult-This is strictly impersonal. The Scanning Center has picked apartments at complete random and we're to make spot checks."

The eye at one end of the box blinked wickedly, waiting for an information feed. "Now, sir, if you'll pardon me. I'll just take the records from one of those desk drawers - any drawer - and put them in the box." Hart slid open a drawer. "No, sir, I think I'll try the next one. It's regulation not to accept suggestions."

With a hand made deft by practise he scooped out all the sheets and tapes and put them in the box. The scanner's fingers rapidly sorted them past the eye. Hart exhaled, relieved that an innocuous drawer had been selected, and the inspector handed back the material to him. "Well, Inspector. that's that."

"Not quite." The Inspector selected another drawer at the other end of the desk and dumped everything before the scanner. His examination was speeding up and that was not good; he would have time to take more sample readings.

"Now if you'll empty your

left pocket -"

Marie exploded. "My husband struggles all night on secret work, studying to find ways to stop the antisocials, and you treat him like one of them!"

"You're working on the problem?" the Inspector said respectfully. "What are you

doing?"

Frying pan to fire. Hart preferred the pan and pulled open a drawer. "It's too complicated, too much time needed to explain!"

The Inspector glanced at his watch. "I'm falling behind schedule." He closed up his box. "Sorry, but I have to leave. Heavy time sheet to-

day."

As soon as he was gone, Hart breathed easier. Nothing incriminating would be fed into the Central Scanner.

Marie became apologetic. "I'm sorry I said it, Wendell, but I couldn't keep quiet. All I did last night was peek in once or twice."

He shrugged. "I'm just on a minor project."

"Every bit counts." She

shook her head. "Only you have to wonder — I mean, don't think I'm treasoning, but while I was shopping an hour ago a lot of women said you have to think — how come all that obsolescent junk could work so well, after being thoroughly wrecked, too? You almost wonder whether some of it was too good for disintegration."

Wendell pretended to be shocked. "Just a fluke of circumstance. If something like that happened again you'd be right to wonder. But it could not ever happen again."

"Don't get me wrong, Wendell. None of the women attacked anything. It was more like what you just said. They said if it happened again, then you'd have to wonder. But of course it couldn't happen again."

How well the tables had turned! Not only had Marie's ignorant knowledge proven helpful but she had now given him a positive idea also.

When he met Wright and Johnson at the latter's apartment that evening he explained it to them. "We can propagate 'dangerous' thoughts and yet appear completely loyal. We can set up the reaction to next High Holy Day."

"How?" demanded Johnson. "That's having your cake and

eating it."

"Nothing's impossible in the human mind," Wright said. "Let's listen." "Here's the point. Wherever you go there will be people tsk-tsking about the Preliminary fiasco. Just reassure them, say it meant nothing at all by itself. If it ever happened again, then there would be room for doubt but, of course, it could not happen again!"

Wright smiled. "That's almost feminine in its subtlety."

He smiled back. "My wife inspired it. Don't get nervous — it was unconscious, sheerly by acident."

"Whatever the cause, it's the perfect result," Johnson conceded. "We'll spread it

through the net."

"Along with this, I hope." Wendell dumped the contacts on a table top. "It's the smallest size possible. A lot should get by unnoticed. Find cell members who can set up cryotrons with a wide range of instructions to cope with anything in the piles. Some weirdly alive concoctions of 'obsolescent' parts ought to result."

"Some day the world's going to know what you've done for it," said Johnson solemnly.

"That could happen too soon!" Miss Wright's face, honest and open in its horse-like length, broke into a wide grin.

"Amen," said Hart, adding the private hope that Marie, blessed with superior looks, might be able to show as much superior wisdom some day. THE hope was not immediately fulfilled. When he reached home Marie was in a tizzy of excitement. "You're just in time, darling. They just caught three subversives. One of them was a woman," she added as this were compounding an improbability with an impossibility. "They're going to show them."

He gripped his belt tightly.

"A woman?"

"That's right. There she is now."

A uniformed officer was gently helping a pale little old woman sit down before the camera, as if she were more an object of pity than of fear.

Hart relaxed.

"— caught red-handed with
the incriminating papers,"
shouted an offstage announcer. "Handbills asserting objects declared obsolescent
could actually last indefinitely!"

"What do you have to say for yourself?" the officer asked gently. "You must realize, of course, that such irreligious behavior precludes your moving in general society for a

long time to come."

"I don't know what came over me," she sobbed in a tired voice. "Curiosity. Yes, curiosity, that's what it was. I saw these sheets of paper in the street and they said we should stop working so hard at compulsory tasks and start working to expand our own interests and personalities."

"Self - contradictory non-

sense!" said the voice.

"Yes, I know that. But it made me curious and I took it home to read, and it said our compulsory tasks were artificially manufactured and, if you didn't believe that, look at the pile that reactivated itself the other day." She stopped, reorganizing her thoughts. "Of course, though, that thing in the Plaza was unique, you know. I don't think it could mean a thing . . . unless it happened a few times. And the fact is it won't ever happen again."

"Well, that much makes very good sense," said Marie. "You said the same thing, Wendell, I don't think that poor woman knew what she was doing — just a dupe for subversive propaganda."

"— a dupe for subversive propaganda," the announcer was saying.

"See, exactly what I said."

"Yes. dear."

How swiftly the decentralized underground was working! Hart could not tell whether the old woman was an active member or just a passive responder, but it did not matter. She was now spreading the seeds for future doubt across the land.

Two old men were brought in and they mumbled the same disconnected story as their sister.

"We have intensively interrogated these prisoners."

boomed the announcer. "and know there is nothing more to the rumored anti-social plot than this stupid chatter. Remain vigilant and you have nothing to fear!"

"You are sentenced to five years isolation from general society," said the officer, in a voice dulcet enough to sell advance orders for replacement products that had not yet been made. "Our intention is to protect you from bad influences. Our hope is that others will take your lesson to heart."

"God bless you," said the woman and her brothers join-

ed in effusive thanks.

"Makes you proud to be a human being," Marie said. "I was getting some stupid doubts myself, dear. I must admit it. But that's all past. I can hardly wait for the Highest Holy Day."

"Neither can I," sighed her

husband.

IV

THE next day at noon Eric L came to him, functioning on the final set of servo instructions that had been installed in him at the factory of his birth eight years before. He shook hands with the two of them and said: "Now I am prepared for death."

Marie was tearful. "I will miss you, Eric. If you were only under five years old your span could be extended."

"Everything that happens

is right," Eric said impassively.

He clambered on to the operation table, instinctively knowing which flat surface was for him, and, breaking all his major circuits, gave up the ghost that only man could restore to him.

Hart found his wife's grief easy to bear. The day after tomorrow she would join in the general exultation of High Holy Day, with Eric well forgotten. He methodically began smashing the surface of the limbs and torso; the greater the visible damage, the greater the honor redounding to the sacrifice donor. "This will be our gift to the general pile." he said.

"I thought we could keep him for our garden sacrifice." Marie protested meekly, "Most people do."

"But the other way is the

greater sacrifice."

There was no reply, because she knew he spoke for the deeper, more moving custom. But suddenly he began to act depressed himself. "I know we say it every ten years, but Eric was really the best companion we ever had." He gestured toward the table. want to sit here with him for a while - alone."

"That's carrying things too far. Wendell. A little grief is proper — but this much is

actually morbid."

"It's all within my rights." She tossed her head petulantly. "Well. I've done my -vare. I can't stand any more. It makes a person think and get depressed. I don't care what you're going to do. I'm going out to enjoy a Preliminary.

"Can't blame you for that,"

he nodded.

When she had gone he started to work on new instruction tapes for activating the servocryotron. Nothing could be surrendered to chance. Every possible circumstance in the pile had to be anticipated. There had to be instructions for action if Eric was crushed below fifty feet of metal, for assembling any kind of scrambled wiring, for adapting all types of parts in its immediate surroundings, for using these parts to absorb parts further away and for timing the operation to the start of the Highest Rite.

Some tapes had been prepared earlier, so it was possible to put everything in the cryotron box before Marie returned, as well as to attach the tiny contact that would reach out from the box until it reached its first external scrap of wire or metal.

"You poor darling," she pouted, "You missed the most wonderful thing! They demolished a whole thirty-story

building!"

His blood, atavistically effected, pulsed faster until his new creed came to grips with his old emotions. "They usually don't bother with buildings for the Rites."

"I know — that's what was so wonderful! The State has decided to make this one the biggest Day of all time. We'll have enough work to fill the whole ten years! Everybody

was so happy."
"I'm sure they were." He caught himself in mid-sar-casm and said. "I'm sorry I

missed it."

"And I'm sorry I've been so selfishly self-centered." She frowned, "I forgot about it, but there were people in the crowd boasting they had been assigned to fight anti-social movements. I had to boast back that my husband had been honored too."

He tensed. "Oh? What did

they say to that?"

"Frankly, they laughed."
"I should think so. The Central Scanner didn't pick up anything except a lot of ineffective propaganda. The sabotage business was all hy-

steria."

"That's just what they said

— the assignments were an
empty honor." She coldly considered Eric. "I want to wreck

him too."

"I've smashed the insides," he said. "You'd better just

work the surface."

"That's all I want to do," she answered, starting to scratch traditional marks all over the dead robot. It gave her a full afternoon of happy, busy labor.

THE next day a large open truck came around and the street echoed to the appeal for contributions. Festival spirit was running high everywhere and when the neighborhood crowd saw the young robot porters carry Eric out there was a loud cheer of appreciation.

"My husband decided on a major contribution right away," Marie announced to them.

"It's the least we could do,"

he said modestly.

Many onlookers, swept away by their example, rushed indoors to bring out additional items of sacrifice. But only two others gave up their robots. The rest clung to them for private Holy Night ceremonies. Soon Eric disappeared under the renewed deluge of egg-beaters and washers.

"The best collection I have seen today," said the inspector accompanying the truck. "You people are to be congratulated for your exceptional patrio-

tism."

"Destroy!" they shouted back joyously. "Make work!"

At dawn the Central Plaza was already crowded and new hordes kept pouring in from outlying areas. Wendell and his wife had been among the first to arrive. They waited, impatient in their separate ways, on the borderline five hundred yards from the tenstory pyre.

Martial music roared from

loudspeakers, interrupted by the mellifluous boom of a merchandising announcer: "New product! Better models! One hundred years of High Holy Days! New! New! NEW!"

"Destroy!" came the returning shout. "Make work! Work! Work!"

All the sounds echoed back and forth until baffled away by the open area across the Plaza, where one large structure had already been destroyed. Three others were slated for collapse today.

"The biggest Holy Day ever," a restless old woman said to Marie. "I've seen all

nine of them."

"Eric's in there," Marie chatted back, superficially sad, deeply happy.

"Who?"

"Our house robot."

"Imagine that! Did you hear that?" People gathered round them and cheered. The good-natured jostling continued until someone said: "Five minutes to go!"

Wendell checked his watch. Somewhere in the pile at least one element was coming to life, a metal arm reaching out for brother metal to engulf in

its cybernetic sweep.

"They're coming!" A line of six shiny new slaggers came rumbling into the open with military precision. They moved along slowly, prolonging the pleasures of anticipation, then broke rank, each seeking its assigned point

around the pile of appliances gathered for destruction.

"The latest improved models," said the loudspeakers. "They will first perform fifteen minutes of automatic maneuvers." The military music resumed and each slagger turned, as if circling a coin, in clanking rhythm to it.

"The three hundred and sixty degree turn. Next, making a box on the Plaza floor . . ."

The voice stopped, appalled.

A N avalanche of metal slid down one side of the pile and the crowd gasped. The downward movement viscously slowed; then the metal, suddenly alive with the capacity to defy gravity, circled upward. Jagged limbs started flailing about.

"Disintegrator attack!" screamed the loudspeakers.

"Attack!"

The maneuvers stopped. For one brief moment prior to changeover the Plaza was dead still, except for the deafening rumble in the pile. The slaggers broke the spell, rushing full speed toward the pile, evaporator beams working.

One by one they faltered and were sucked into the de-

structive pyre.

The crowd fell further back. The whole pile came alive like a mineral octupus. Then the squirming thing collapsed, every makeshift circuit irreparably broken and dead. Everything had been happening too

fast for any pronounced reaction to accompany it; but now the world went crazy.

"Stand firm!" pleaded the loudspeakers, "We will get reinforcements as soon as celeare finished elsebrations where."

A barrage of enormous boos came from the disintegrating mob. "Never again! Fakes! It's finished, done for!"

"Stand firm!"

But the breakup down side avenues continued. "I don't understand," Marie shuddered. "Everything's crazy. We've been deceived, Wendell. Who's been deceiving us?"

"Nobody — unless it's our-

don't understand that

selves." "1

either." Saucer-eyed watched a great clump of disgruntled people push past. "I have to think!"

Suddenly, as they came around a corner, they were

facing Burnett.

Hart tried to disregard him but the group leader would have none of that. He rushed up to Hart. "Good to see a friendly face. Shocking developments!" His face was grim. but tiny wrinkles at the corners of his eyes betrayed an amusement that could only be discovered by those who looked for it.

"Mr. Burnett," he explained to Marie. "A librarian at the main building. Mr. Burnett, my wife Marie."

"I am most happy to meet

heard the latest?"

"No. Mr. Burnett."

"The same things have been happening everywhere! They announced it on the radio and they're saying it's due to antisocial elements. Shocking!"

you, Mrs. Hart. Have you

She shook her head stubbornly. "I don't know what to think. Maybe we shouldn't be shocked, maybe we should be. I just don't know, Mr. Burnett. I came to enjoy myself and look how it's ended." She bravely held back a sob. "Maybe we'd have been better off if we've never heard about High Holy Days!"

Burnett looked about with feigned apprehension. have to be careful what you say. The government says there's even talk — subversive handbills — about trying to rehabilitate some of the stuff in the piles."

"The government ought to keep quiet!" she exploded. "They said this couldn't happen. You can't believe anything they say any more. The people decide and the government will have to listen, that's what I say! And I'm a pretty typical person, not one of your intellectual kind. No criticism of present company intended."

"None taken, Mrs. Hart. Our human future," said Burnett, exchanging a grin with his aide, "remains, as it always has really been. Interesting— to say the least!"

END

HUE AND CRY

WELL, here we are, month after month trying to do the best we can in the way of producing an IF you'll like, and it's sometimes like dropping words down a well. We know you're out there because somebody buys all those magazines! But, specifically, who are you?

One of you is Lawrence Crilly of Elizabeth, New Jer-

sey, who writes:

Is is too much to ask for a letter-col? It'd convince the fans that you're actually trying to please them — while capturing the attention of casual readers — and the promise of egoboo if their names appeared in print would compel a large number of readers to comment on the stories, who normally do not — myself included. You ought to give this serious consideration.

We did. Sounds like a good deal . . . so . . . consider this the letter-col; and if it's brief this time, it's because we don't have much more that we can publish.

But you can remedy that! Just get down to your type-writers!

And while you're writing, check us out on a couple of basic assumptions we're making. For instance:

Assumption Number One: There's space in the science

fiction field...somewhere between the childish adventure and the Prophets of Doom... for a magazine that'll give the reader stories to enjoy as well as something to think about.

We think, in other words, that although science-fiction has come a long way, there is still a lot that the long-time "Great Names" of science fiction have to give us. (For which reason we're proud to welcome back, in near-future issues, the likes of Lester del Rey, E. E. "Skylark" Smith and a dozen more all-time favorites.) What we aim for in IF is all the color of the old days, and all the stimulation of the new.

Assumption Number Two: The readers are entitled to a share in making the decisions. Accordingly, we'll try to do what you want — asking only that you tell us what it is!

Assumption Number Three: That "progress" is sometimes spelled M-I-S-T-A-K-E. We'll try to do what you want — but if we goof, tell us so!

As a starter, next issue will have a slightly different format—a more compact type and therefore, we hope, more story-content. We'll be looking forward to knowing what you think of that—and everything else!

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