

FANTASTIC UNIVERSE

FEB. 1958
Vol. 9, No. 2

Open All Doors	4
by Harry Harrison	
and Hubert Pritchard	
Sense of Wonder	23
by Bertram Chandler	
Lazarus Bell	29
by Stanley Mullen	
Continents in Space	51
by Ivan T. Sanderson	
Freak Show	65
by Miriam Allen deFord	
The Makers	75
by Winona McClintic	
Shapes in the Sky	83
by Civilian Saucer Intelligence	
Universe in Books	93
by Hans Stefan Santesson	
Saucers - Fact Not Fiction	98
by Morris K. Jessup	
Familiar Face	108
by Don Berry	
Insane Planet	112
by Thomas N. Scortia	

FANTASTIC UNIVERSE, Vol. 9, No. 2. Published monthly by King-Size Publications, Inc., 320 Fifth Ave., N. Y. 1, N. Y. Subscription, 12 Issues \$3.75, single copies 35c. Foreign postage extra. Reentered as second-class matter at the post office, New York, N. Y. The characters in this magazine are entirely fictitious and have no relation to any persons living or dead. Copyright, 1957, by King-Size Publications, Inc. All rights reserved. February, 1958. Printed in U. S. A.

Virgil Finlay

Cover Design

open
all
doors

by HARRY HARRISON
and HUBERT PRITCHARD

Cole Everard was fighting for more than the freedom of these men, and for his own professional future.

IF COLE EVERARD had just taken one moment to think about what he was doing, he would have known that there wasn't a chance in the world that he could succeed. But he was too carried away by the grandeur of his discovery to care: he wanted to tell the whole world that he was on the track of a cure for the most tragic of all mental ills—schizophrenia.

The whole world of Devanel hospital was embodied in the corpulent figure of its director, Dr. G.A.B. McChesney, who didn't want to see Dr. Cole Everard—a feeling which grew stronger with each passing moment of the interview. Everything about the young researcher, from his gray wiped coat to the smell of experimental animals which never quite left him, was an insult to the dignity of his office.

Everard placed the vial tenderly on McChesney's desk and eyed it with the fond look of a father with his first-born.

"It's something completely new, Dr. McChesney. I brought it up to you just as soon as I was sure it worked. And it does! The few drops

Harry Harrison, writer and editor now living abroad, and Hubert Pritchard, take us one step further here in the story of Man's conquest—Tomorrow—of the ultimate disease. We are particularly happy to publish this interesting story, representative of thoughtful SF at its best.

in this jar are all I have so far. It's a cofactor that goes directly to the biochemical lesion in schizophrenia. If it works out in practice—and I'm sure it will—we will have the greatest discovery in cortical drugs since Dilantin completely knocked out epilepsy. Schizophrenia will be just another bad memory like the black plague and smallpox!"

Dr. McChesney pushed the sticky bottle off of his neat stack of correspondence and thus managed to control his temper.

"Dr. Everard, I know nothing about this cofactor of yours and frankly I don't care—unless it has something to do with the urinalysis series you're doing on Dr. Snyder's adrenalectomized patients. You do realize that your part of the program has fallen behind schedule."

Cole didn't even notice the storm signals or hear the distant rumble of thunder in McChesney's voice; his eyes were still fixed on the golden vision of his cofactor.

"This is infinitely more important than Snyder's adrenals—not that his work isn't important—but this cofactor may change the entire approach to mental disease. Jung himself admitted that schizophrenia might be caused by biochemical poisoning—and here is the proof that he was right!"

McChesney had stopped

listening. He had held his patience quite enough.

"Everard, under just what authorization have you conducted these experiments? And what fiscal deposition are you using to finance them? This hospital is run—"

"I know, run like a calculating machine—without even an artificial heart to pump a little blood through it!" Cole shouted, letting his anger get the best of him. "You haven't heard a word I have been saying—my experiments are infinitely more important than any number of chopped up adrenals—"

Cole was right, McChesney had *not* heard anything he said; he heard only the tones of insult and the sound of good money being rolled down the drain.

"That's enough, Everard—more than enough! In the past I have supported your insults because I feel you are a valuable man on our staff and an asset to this hospital—when you do your job! But if you don't deliver a statistically integrated report on the urines of Dr. Snyder's patients, and direct your energies to projects approved by this staff—and not freely appropriate time and budget money—then you may suddenly find yourself with all the time in the world. Outside of Davenel Hospital!" The words were roared out by the infuriated McChesney, finger shaking in Cole's

flushed and swollen face. He dropped limply back into his chair and fumbled a thorayine pill out of his drawer, washing it down with a cup of water.

Cole Everard was standing now, angry as the doctor. He opened his mouth—and at the last moment realized McChesney wasn't buying a word that he said; and anything else would only bring the whole works down around his head. Turning on his heel, while he could still control the dregs of his temper, he stalked out of the office. Back in the lab he threw 50 cc's of grain alcohol into a beaker, cut it with 40 cc's of distilled water and threw the mixture down his throat in one gulp.

Then he dropped onto a stool and brooded into the blue flame of a bunsen burner. What could he do next?

The cofactor *worked*—he would stake his life on that. He had tried it only on dogs but the results were more than favorable. It was a good thing McChesney didn't know about them or it would really be in the fan. It was frustrating. He couldn't prove the cofactor worked until he extracted a greater quantity and did controlled tests with human volunteers.

Growling to himself he opened the door of the storage cabinet and put away the bottle of cofactor. As he did, his eyes caught a gleam from a small, golden tube.

And he stopped. Still. Transfixed by inspiration.

The tube was a lipstick, left there by Jean Telfan. She had left it in the lab the last time she had been there—to bawl him out for breaking a date, he realized with a guilty start. Jean liked him, and he liked her when he had the time. And just as important, Jean was the daughter of Grisby Telfan, one of the most important members of the advisory board of the Lambda Foundation.

It was as simple as carbonic equilibrium— $H_2O + CO_2 = H_2CO_3$. If he couldn't work at the hospital he would get a grant and use that to finish the tests. He would get Jean and explain everything to her; once she understood the importance of the work she would easily convince her father that a Lambda grant was in order. Groping through the papers on his desk he found her number.

He hummed while he dialed; things were going to turn out. And Jean was a blood technician herself; she would understand when he explained what the cofactor was all about.

JEAN came over at five-thirty, as soon as she was out of work. Cole waved her to the only chair in the lab and sat down on the edge of the bench across from her. She liked this boyish-looking man with the broad grin, and she

didn't care who knew it. Before sitting down she kissed him and tried not to smile at his sudden flush.

"Jean, it's sure nice to see you. And have I got good news for you!"

She sighed lightly and waited patiently. She knew from past experience the "good news" would be about the facts of nature, not the facts of life. Some day she would break through the scientist and find the man—but it was a long, hard fight.

Cole noticed none of this: it was cofactor all the way.

"I'm going to start from the very beginning," he said, "because I want you to get the whole picture, just what happened and why."

"I was running a standard test on one of the patients here, Martinson, a schizophrenic. I found a number of ketosteroids in his urine that I had never run across before."

Jean's brows knitted in thought. "The only ones I can remember are the 17-ketosteroids; urinary breakdown products of hormonal origin, aren't they?"

Cole nodded. "That's right, well these other ketosteroids puzzled me and I looked for other keto positions on the phenanthrene nucleus.

"Just about this time Martinson went on shock, while I was trying to locate the positions of these new keto groups. I didn't bother re-

porting my findings to the clinicians in charge of the case because I really only had a chemical curiosity. Just a few tired ketosteroids that meant nothing in themselves. Then came the shocker.

"Martinson had finished the usual fifty insulin comas and had made a decided improvement. You know—resumed contact with reality and was less anxious. I got another urine specimen from him at this time and ran an analysis. The results seemed impossible and I did it over three times to make sure.

"The extra ketosteroids weren't there any more!"

Jean caught the significance of this, but before she could say anything Cole rushed on.

"I know—slim evidence and all that—only one patient. But I knew where to look. I did analyses on seventy-six other diagnosed schizophrenics here in the hospital and all but *three* turned out the same way. You see the enormous significance of this? For the first time a demonstrable biochemical difference in the "insane" has been shown. This was six months ago."

"And now where are you?" Jean asked eagerly, caught up by his enthusiasm.

"I'm almost afraid to say, Jean—it's so big. In the beginning I had a number of possibilities for the difference, but gradually I elimi-

nated them all except one. My unknown steroid, something that was normally manufactured by the body, was not getting to its destination. The body is filled with chemicals that never appear as breakdown products; they are completely involved in an internal cycle. Well, my steroid was being manufactured by the body all right—but it was not getting to its destination in the brain tissue of schizophrenics. When it kept piling up in the blood stream the kidneys started to eliminate it. This suggested to me that some *cofactor* was missing, some chemical lever required by the body to properly utilize the steroid.

"After that it was just hard pencil and paper chemistry. I worked it back and forth ten ways and finally figured out that if a cofactor was missing that could utilize a steroid like the one I found, then the cofactor *should* resemble the respiratory enzyme apo ferritin. I was still shooting in the dark. Looked good on paper but I had nothing in the flask. I ran a lot of normal blood samples and found the predicted cofactor in all of them."

"And in your schizoids?" Jean asked.

"Not one of them," Cole said with more than a touch of pride in his voice. "Not one of them had this predicted cofactor. I had found a real biochemical difference in

the schizophrenics—that we can *change*!"

"I see what you're aiming at," Jean said. "You can effect a cure by simply replacing the missing cofactor; it doesn't really matter if you understand the basic mechanism or not at this time."

"Right!" Cole was jubilant now. "Like treatment for diabetes. The whole sugar metabolism is poorly understood as well as the basic role of insulin—yet the treatment with insulin is successful."

Then Cole's face fell as he remembered.

"But I can't do a thing; McChesney has forbidden me to work on the tests. If I could get a grant from a foundation I know I could finish the work."

Jean hoped that her feelings didn't show on her face. She *had* been wishing Cole had called her over just to talk about his work, share his confidence with her. Now it looked like the only reason she was here was to help him gain access to the coffers of the Lambda Foundation. But even that was something. At least there was some way she could help him, be near him. Then she remembered.

"I'd like to help you Cole. I'm sure my father would see your work deserves a grant. Only—all the grants have been assigned for this year. I'll ask him anyway. In six to eight months I know..."

"Six months!" There was

real agony in his voice. "I have to do the work now. There is such a little bit left to do, the hardest part is finished. I can't wait six months."

After that the conversation waned and died a natural death. Cole scowled to himself and barely roused himself enough to wave when she left; he was scarcely aware of it. He was never really aware of the unhappiness on her face.

THERE was only one thing to do—and Cole did it. While his assistants made out as well as they could with the urinanalysis of Dr. Snyder's patients, Cole devoted all his time to his own work. The distillation of a sufficient quantity of cofactor to administer to a hundred people was a time-consuming project—it even involved incubation for a period with mouse kidney to remove a radical on the nitrogenous ester.

Then everything started to go to pieces all at once.

The day began like any other one, only at 11:00 there was a call from Dr. McChesney's secretary. Dr. McChesney wanted to see Dr. Everard at once. Cole pulled off his lab coat with a feeling of guilt. It was impossible to keep anything a secret in a big hospital—he had a good idea why McChesney wanted to see him.

He wasn't wrong. Dr. Mc-

Chesney sat behind the desk like a wrathful buddha and pierced Cole with a 200,000 volt glare.

"Everard, word has reached me that you have continued with the experiments I expressly forbid. Not only that, but I understand you have applied for funds to continue these experiments from sources outside of this hospital. In your application you said something about wanting to set up a massive program to cure every mental patient in the country."

Cole's collar was getting warm.

"Just a minute," he said. "What I do in this hospital may be your business, but you have no call to go snooping outside of it. If you have some friend on the board of the Lambda Foundation who has seen fit to disclose confidential information to you—well, I hate to say what I think of his spying and your actions."

He was shouting when he finished and McChesney matched him tone for tone.

"You have no right to judge anyone! You applied for funds towards a project never approved by the board of this hospital. In addition you misused hospital funds to continue those same experiments—incredible, impossible experiments! At least, if there was some rational excuse for your actions. But a miracle drug to cure mental

patients! Haven't you ever heard of environmental conditioning? Don't you think Freud contributed *anything* to psychiatry with the concept of evolutionary development of the ego-id complex..."

"That's enough McChesney—that's enough!"

It was just too much. Cole's temper snapped like a dried out rubber band and he roared at McChesney, banging the desk so hard that the ink bottle bounced to the floor. McChesney dropped back into his chair, just a touch of fear in his eyes.

"Who are you to talk about medicine; you haven't practiced on anything more human than a balance sheet in the past thirty years! You haven't the brains or capacity to *understand* what I'm talking about. I tell you I have the answer the world has been seeking for thousands of years—the answer to mental illness! One out of every mental ward in America—in the world!"

Dr. McChesney stopped listening then, though Cole kept talking. The thought had hit McChesney that this man wasn't talking like a rational research worker—these insults, these grandiose statements. The occupational hazard of working in a mental hospital was the chance of a breakdown *yourself*. And Everard was showing all the symptoms. The symptoms fit

something McChesney had noticed that morning.

Quietly he slipped open the top door of his desk and looked at the personnel record inside it. It was Cole Everard's record—open to his history, to an entry that had puzzled Dr. McChesney.

1946—2 mths. in Psychiatric Ward, U.S. Military Hospital, Glenning, Georgia.

It was obvious now—he should have recognized it before. The poor fellow was having a relapse. Probably long swing manic-depressive who got into trouble every five or ten years. A few months in the ward would fix him up. Maybe a little electro-shock therapy; probably wouldn't need any more than that. When Cole finally stopped, out of breath, McChesney spoke quietly.

"Well—I hadn't looked at it in that light before, Everard. But you're right in one thing: I don't think I am qualified to make any final decisions about your work. Too long behind this desk, as you say. I would feel better if you explained the whole thing to Dr. Viner, I'll just have him step in."

He pressed the button on his intercom and put in a call to Viner while Cole sat there, his jaw hanging open. Victory had come so suddenly he couldn't tell what to make of it.

He never saw the obvious, even when he asked McChes-

ney, "But—why Dr. Viner—he's head of the clinical wing? Wouldn't a lab man be of more use here?"

McChesney smiled. "I always consult Dr. Viner in these matters. He's a good all around man. Ah—here he is now."

Dr. Viner shook hands, then turned to McChesney who explained.

"Dr. Everard here has made a rather remarkable discovery. It seems he has a cure for insanity—just a simple injection." As he said it, he tipped Viner a wink that Cole didn't see.

Dr. Viner gave an involuntary start, then regained his composure. He had seen too many associates locked in their own wards to be completely surprised.

"Tell me how it works, Evarard—I'm most interested."

"A matter of replacing the missing cofactor," Cole began—and continued that way. He was excited and told his story in confused fashion, skipping back and forth from point to point. His enthusiasm got the better of him and Dr. Viner very shortly began to understand why McChesney had called him.

When Cole had finished, McChesney asked him to wait outside, then played his ace card for Dr. Viner. He had a tape-recorder in his desk: all of Cole's earlier angry words had been recorded. Dr. Viner

listened to about half of it, then interrupted.

"I'm afraid you're right, Doctor, we should hold him for observation. We had better take some steps to make sure he doesn't do himself or anyone else any violence."

They made a call and went out and talked soothingly to Cole. His enthusiasm had cooled and he was just catching the odor of rat when the outer door opened. Powers came in, the attendant from 2 West, and his assistant Schwartzkopf, six feet of ex-stevedore. When Everard understood, he roared with anger and they reached for him. In four seconds he was immobilized on the gray carpet. It was the worst possible thing he could have done. Violence was no good against the trained heavyweights and after the wrestling match nothing he could possibly say would convince the two doctors a mistake had been made. He tried to talk and they politely ignored him.

"Take him to 2 West," Dr. Viner said. "He can have freedom of the floor unless he causes trouble; in that case isolate him. And tell Miss Trask, the duty nurse, to get in touch with me. I'll write the orders for Everard when I make afternoon rounds."

Thirty minutes later a slightly dazed Cole found himself sitting on a bench in 2 West, his belt and shoelaces gone and only a handkerchief

in his pockets. The whole world was in ruins about his ears and it took some getting used to.

All of his plans now had to resolve around his new status as a mental patient. From working in the hospital he was well aware of how complete the legal, personal and physical control was of committed patients. He also remembered from personal experience.

Rightly enough, he suspected that his medical record had some bearing on his confinement. He hoped they would get his records from the army to investigate; the record, he knew, was all in his favor. He had been working in a field hospital then, under fire a good part of the time, and no chance to rest. It finally got to him after almost four days without sleep. Shell-shock, nervous breakdown, combat fatigue—call it what you will. It just meant the human machine had been stretched past its final endurance and broken down. His hospital confinement and cure had consisted mostly of sleep, food and vitamin shots. Cole wondered how much of that was in the record.

Fear nibbled at the edge of his mind and troubled his thoughts. *NO!* He was *not* squirrely, no matter what they thought. If he could keep control of himself even this spot could be gotten out of. The cigarette began to

singe his fingers and he ground it out. Taking another one from the pack on the table he went to the attendant for a light and sat back down on the bench. *Think.* There had to be an answer.

It was dinner time then and the patients lined up. Cole joined them, glad of the distraction. They filed in and the door was locked behind them. The barely-warm food was almost edible, soft and soapy so you didn't even miss the knife. When they had finished, and the silverware was carefully counted, the apathetic line of men filed back to the cheerless ward.

COLE stayed awake late that night, barely aware of the men around him in the ward and the everpresent attendants with their flickering flashlights. He rejected one idea after another until there, all at once, was the perfect plan. It was dangerous, seemingly insane (what better kind of plan for this place!) and might not work. But it was worth trying.

He would test his cofactor right here—under their noses.

In the morning he watched the routine of the ward carefully so he could adhere to it. He didn't want to be noticed or receive any special attention. After painfully shaving with the ward razor under the watchful eyes of an attendant—a bolted-shut razor that was used by twelve men and the blade changed

once a week—he went in with the rest for a tasteless breakfast. That morning he had his first interview with his assigned psychiatrist. He was Harold Brennan, a first rate clinician whom Cole met casually once or twice. They had a pleasant conversation and Brennan made the decision Cole had been hoping for. There was to be no hurry about treatment, a few weeks' observation first. If organic therapy had been begun at once, Cole could have done nothing.

He wrote a letter to Jean Telfan which, after careful censorship by the staff, was forwarded to her. While only immediate family usually was permitted in on first visits, Brennan O.K.'d her coming, and on Saturday she showed up.

She came in with a quick step and a smile—but he could tell by her sideward glances she was unsure of herself. In spite of her years of work in medicine she had no firsthand knowledge of the inside of a mental ward. She couldn't realize that every patient there was more insecure and ill at ease than she could possibly be. Cole spent the first half hour just chatting until she relaxed, then began his carefully worked out plan to enlist her support. First and most important, he had to assure her of his own sanity and the validity of his discovery.

"As you can plainly see," he said, "Dr. McChesney doesn't think too much of my work." Even though he tried to sound cheerful when he said it, Jean blushed and looked unhappy.

"Oh, Cole...how did you ever end up here, are you—I mean..."

"A little off my rocker?" he answered. "I don't think so—and I imagine the doctors will be finding that out soon too. I guess my theory and discoveries—certainly their presentation—were a little too radical to accept."

Jean bit her lip and wouldn't look directly at him. Leaning forward, Cole took her hand, trying to communicate the urgency and importance of his words.

"I know what you're thinking and I can't blame you. Here I sit in the loose-bolt factory and have the nerve to say that they are all out of step but me. Sounds like I belong here. But it is not only *me myself* who is challenging the old ideas—there is an entire new body of thought and experiment on the subject.

"Serum has been removed from the blood of patients suffering from paranoia and injected into the arms of healthy volunteers. These volunteers then manifested *all* the symptoms of paranoia! Do you get the significance of that? No textbook theory of an oedipus complex can apply here—the volunteers

had mental disease symptoms by purely biochemical means. Hallucinations have been produced by tiny doses of such drugs as mescaline. On the other hand, the reverse has been done—patients drawn out of mania under treatment with chlorpromazine and rauwolfia serpentina."

Jean was interested, but not completely convinced.

"Cole, are you saying that all the work in psychoanalysis and expressive techniques has led up a blind alley? That so many brilliant men are all wrong?"

"Of course not. The people my cofactor therapy is designed for are *beyond* analysis. Some of them can't even open their mouths to utter an intelligent syllable no less grapple rationally with a problem. And incidentally, if couch analysis can be brought down from its present answer-all position it won't be the first time the old gave way to the new; it hasn't been so long since people thought the whole nonsense of astrology was a real science.

"All I'm saying is that the cofactor is a provable phenomenon—let's test it."

They were interrupted by Vatelli, the catatonic, who jerked into his erect, unseeing rigor a few feet from where they sat. To Jean it was an awesome spectacle, a man so descended into the caverns of his own mind that he was momentarily uncon-

scious on his feet. But to Cole the urgency of the problem was driven home, the crying need of men like Vatelli could not wait.

"If only I had had a chance to finish the experiments, they never would have popped me away in here." Jean nodded and he continued quickly. "Or if I could finish the experiments now, actually inject some patients, that would be proof—they would have to let me out."

"I—suppose so," Jean agreed with him, but not so positively. "But of course you couldn't do anything about it while you're still in—here."

"Yes, I could," Cole said, leaning close to her, "if you would help me. I could tell you where the cofactor is and what I would need. You could easily get it from the lab and bring it in here next Saturday."

"No" she said, standing up suddenly. "I mean—do you think that would be wise? After all, it might not work and, perhaps it would be better to wait awhile." There were tears in her eyes and what could only be fear.

Cole was horrified. "Jean—don't you believe me? Just because they have me locked in here, does that make them right, and me wrong?"

"Well—they must have had a reason..."

He dropped back on the bench, defeated. He had expected too much from her.

Maybe she loved him, as she said, but she couldn't violate society—go against The Men Who Knew. There could be no mistakes. He was locked up. He was nuts. That's as far as she could see. She would make excuses but she would never help him.

Their conversation lagged after that and she left early. Neither of them suggested that she return the next Saturday. She had a handkerchief to her eyes when she went out the door and Cole felt she was walking out of his life as well.

It hurt, but she could hardly be blamed for hesitating. There was going to be no one to help him, he would have to go it alone. His original plan still held—only he would have to get the cofactor by himself. His lab was upstairs in the same building—that helped.

It would still mean that he would have to make a break for it; at least escape for awhile from the constant vigilance of the attendants. One by one he ran over the possibilities.

TWO weeks slowly passed and time was beginning to run out. He had to get to his lab for the cofactor—but the ward doors were always locked and the patients never allowed out. With one exception: when they went to hydrotherapy. The patients were sometimes nervous on the way there, though after

the relaxing water the return trip was peaceful. This was the time Cole would make his break.

The next day in hydrotherapy he tried to be part of the crowd so he wouldn't be noticed particularly. Laughing, he pushed Hardy out from under the eight foot stream of water and was himself pushed out in return. Then the period was over and they dried themselves leisurely and dressed. Walking slowly the group began to make its way back to the ward.

The attendants stood at each cross corridor in case anyone should break free and try to run away. There was no place to go with all the doors locked, but many patients just had the irrational desire to run. As they approached the elevator, Cole tensed. This was it.

"Look out!" he shouted, "Wyckoff has a knife!"

With smooth experience Nurse Welle and the attendant Schwartzkopf separated the group from Wyckoff who just stood there fluttering his hands. That was all Cole waited to see, then he ran towards the fire exit.

This was the only way. The elevator operator knew which prisoners were allowed freedom of the building, so that was out as well as the locked stairway. But the fire exit was never locked.

"Stop!" Miss Welle shout-

ed, but it was too late. Even as they started towards him he had the door open and was going up the stairs two at a time. The heavy footsteps of Schwartzkopf thudded up behind him.

It was three flights up and he was winded when he made it. Slamming open the hall door he raced to his lab. The hall was empty and so was the lab—they were all at lunch. This was a piece of luck he hadn't counted on and he made the most of it. He had planned every motion for days.

First to the cabinet to grab a double handful of co-factor ampules; they went in his right pocket, and a handful of morphine styrettes was jammed into his left. On top of the ampules some #20 sterile needles and a syringe. He had just groped a length of rubber tubing out of the back of a drawer when Schwartzkopf burst in through the hall door. The tubing fell when he tried to put it in his pocket on the run and he had to leave it. Darting through the connecting office he made it back to the hall and the stairwell.

Getting back to the group of patients below was easy—it was the one direction they didn't think he would go. Cole raced out of the fire exit door and smashed into the astonished patients. There was only a moment and he made the most of it.

"Hide these," he said, handing the ampules and needles to Hardy. With the unspoken allegiance against authority Hardy stuffed some of the things into his cuffs and put the remainder in his mouth. He didn't know what they were and he didn't care, it was enough that they were against the authorities.

When the exit door banged open again and the panting Schwartzkopf ran out Cole was fifteen feet down the hall. A second attendant appeared at the junction ahead and in a moment they had caught Cole and threw him on the floor. Hustling him back to the ward they searched him thoroughly—angry at his escape; a knee in the groin and a kick in the kidney were part of the search. The morphine styrettes were easily found and the attendants were satisfied. They left him lying on his bed, in pain but happier than he had been for weeks.

Dr. Brennan immediately sent for Cole, but could get no satisfaction. They talked in the interview room for about twenty minutes, then the puzzled doctor sent Cole back and confined him to the ward.

With an ease born of experience with illicit food and matches, the patients kept the ampules and syringe out of sight of the watchful attendants. From the box of scrabble pieces to the radiator they

went, constantly on the move since the ward was routinely searched thoroughly twice a day. The patients didn't know what they were hiding, they just helped to join in any resistance to the omnipotent authority of the hospital. That evening the things reached Cole as he sat in the television room after dinner. Waiting until the program was over, he left and went into the ward. Standing next to one of the metal framed windows he looked down at the city lights below.

At the same time he squeezed his upper arm tightly against the book underneath it, compressing the brachial vein. Keeping a close look behind him in the mirror-like dark window, he carefully slid the syringe out of the front of his shirt. The small veins on his wrists stood up clearly and he emptied the syringe full of co-factor into one of them.

A few minutes later Hardy passed by and he slipped him the syringe. Hardy would take care to see that it and the other ampules weren't discovered. Cole had no idea what his own physical reaction might be and didn't want the things found on him. He went to his bed and sat on it to wait.

It is a dangerous procedure to test a new drug—prison volunteers are used whenever possible. But it is far from unknown that a research

worker will test an unknown drug or chemical on himself and is one of the high causes of mortality in the field. Cole thought wryly about that as he waited—then the reaction hit.

A wave of nausea first—he barely made the bathroom—followed by what felt like a high fever. Even in his agony he wished he could take his temperature—as well as running some hematology and urine studies on himself. Back on his bed he almost passed out.

The staff thought he was quite ill, but he wouldn't talk to them. They finally decided that the physical reaction was part of the complex that started with his "elopement," as they called it, so they left him alone.

WHEN two days had passed without further incident, Cole was sure that the cofactor was safe for physically sound people. He wouldn't try it on any of the other patients with long standing physical defects or history of pathology.

After careful thought he selected three of the worst cases in the ward, cases in which any change would be dramatic. First Wyckoff the bird with his constantly flapping "wings." Then Schefflin the paranoid who was so positive that the F.B.I. was after him that he wouldn't even answer to his own name. The last case—and the severest

test of the cofactor—was Friedman. He had lost *all* contact with reality; sitting in his own waste he had reverted to the vegetable. Not only would these men be good subjects, but he could treat them without their even wondering who he was.

Cole had qualms about treating helpless men, without their permission. Inadvertently, Dr. Brennan killed these fears without even realizing it.

"I've examined your X-rays and EK-G," Dr. Brennan said at their next session. "Your cervical spine is normal, Everard—as well as your heart."

Cole knew very well what that meant. Electric shock therapy. When the current was applied to the brain the generalized discharge from the motor cortex could stop the heart or actually cause the comatose patient to fracture his own spine by muscular contraction; the patient had to be in good shape for E.C.T.

"What if I told you I didn't want this therapy, what would you do then?" Cole asked.

"You're a trained man, Everard," Dr. Brennan answered, "so I'm sure you understand that in cases like this we know what is best for the patient. I don't usually explain to patients why I am giving them ECT, but in your case it is slightly different. For awhile I thought there

was nothing wrong with you, that you were just a little overwrought and excitable by nature. But that unexplained attempt at elopement forces me to only one conclusion. You're somewhat confused and could benefit from a short course of shock—just six or eight—these would relieve some of the pressure that seems to dog you."

"I don't want shock therapy, I refuse to take the treatments."

"I'm sure you will feel differently after the treatments," Dr. Brennan said smoothly. "It's a very benign procedure—why we even do it on an outpatient basis now."

Back in the ward Cole found that his qualms about attempting to treat the other patients had vanished. He had four days before his shock therapy was to begin, he had to make the most of it.

Friedman, the vegetable, was the man to start on, he was completely unaware who was handling him. That evening Cole tied his handkerchief around Friedman's arm while talking engagingly to divert the attention of anyone who might be watching. He broke the top off an ampule, filled the syringe, and eased the needle into Friedman's antecubital vein; it was large and he had no trouble.

It was over in a moment. Fortunately the dose of cofactor, though somewhat viscous, was a very small

amount. Cole thanked his luck that the cofactor didn't have to be administered like an ACTH drip—ten hours a day for a week!

There was the beauty of it. Just as reserpine unbound serotonin in a ratio of 1:1000, the cofactor surely operated at these same binding sites in the brain in the same staggering ratio. *That would be interesting to demonstrate*, he thought, *after I'm out of this place*. If it works, came the sobering thought.

So far so good. The sooner he finished the less the danger of discovery.

"What are you doing?"

Cole spun around to see Schefflin looking at him with suspicion in his eye. "Are you preparing a secret report to the Government agents about me? Are you an agent?"

"Schefflin," said Cole. "I've got the answer, right here in my pocket."

"What answer? What answer?"

"How to take the men off your trail once and for all."

Schefflin looked around. "We can't talk here—let's go over behind the big lamp."

In the corner Cole pressed his advantage. "I have a medicine that will so change you that no one will ever again be able to follow you. They won't know you. You'll be a different man. I'll give some to you if you promise not to tell anyone."

"I don't like medicine—it's

all just sugar pills to fool you," said Schefflin.

"This one *hurts* a little as it goes in so it must be good. The only other man who ever received it was so changed I couldn't identify him myself."

The highly suspicious Schefflin gradually became interested, and what swung him over was the fact he liked Cole. A week later he might think he was J. Edgar Hoover's right hand man, but for the moment Cole was "in," both in Schefflin's mind and now his venous system. The "secret" part of it all appealed most to Schefflin. He was letting Cole "hide" something in him.

Wyckoff, the bird, was literally caught in mid-flight by Cole who infused him between the short flappings of those lightly poised arms. Wyckoff said "Ow" but didn't stop flying.

Cole leaned on the open window ledge to replace the syringe when the attendant's voice cut through his thoughts.

"Everard—what are you doing there—what do you have?"

Schwartzkopf's heavy footsteps approached and Cole did the only thing he could. If the syringe and ampules were discovered now the whole game was up. With a quick snap of his hand he sent the vital drugs spinning out into the night. They made

a faint tinkle when they hit the bushes in the empty lot far below.

A heavy hand spun him around and beetle-browed Schwartzkopf was looking searchingly at the window ledge.

"I was just getting some air," Cole said.

Still suspicious but not able to prove anything, the attendant went away. Cole slumped on a bench, suddenly weak. The whole thing was out of his hands now. The men he treated might need more than one injection to show any change; hopefully one was enough. There was nothing more he could do—except worry. This he did very well until his nails were all even with the flesh.

The next day, Sunday, the resident doctor on duty, Dr. Polter, was called for three sick men. He diagnosed mild food poisoning and recommended bed rest for Wyckoff, Scheffling and Friedman. But when the nausea persisted, a frightened Schefflin enlisted Nurse Fleck in his confidence.

"Don't tell the doctor," he said, "but I think it's the medicine that Cole hid in my arm, right here."

Miss Fleck was smiling when she examined the arm; you shouldn't combat a patient's delusions. Then her eyes widened as she saw the unmistakable sign of a venipuncture with its minute he-

matoma. A quick examination of the other two patients verified her suspicion. She called Dr. Polter and he brought in Dr. Brennan because of Cole's involvement in the case. They couldn't diagnose the patients' trouble; they questioned Cole. He gave them no satisfaction at all, flatly refusing to answer their questions, disclaiming all involvement.

They locked him in the isolation room and returned to the bedridden patients.

Cole spent a long night locked away from the ward. There was no furniture in the isolation room, not even pads on the walls. Just the door, a wired window high on one wall, and a bare rubber mattress on the floor. It was almost dawn before he could fall asleep.

He woke up with a sudden start—then remembered where he was. From the angle of light through the window it looked to be about seven in the morning. Yawning he walked to the door—and froze.

There was a six by six wired window in the door and through it he could see one corner of the dormitory. Wyckoff was sitting up in bed—sitting still! The "bird" was gone, for the first time since Cole had known him the man's arms weren't in motion. Wyckoff looked a little dazed. He turned to Friedman in the next bed and said

something. Friedman, the human vegetable, the man who hadn't uttered a meaningful sound in two years.

Friedman looked just as dazed as Wyckoff—but he answered him. They talked for a minuted then Friedman rolled over and went back to sleep.

The cofactor worked—one shot was enough to effect a temporary cure! Now all he had to do was prove it to the authorities.

He didn't know how long the effect would last; he had to act at once. When Schwarzpf opened the isolation room door for breakfast, Cole was behind it; his doubled fists caught the big man in the back of the neck and he dropped without a sound. Stopping only long enough to take the attendant's passkey, he stepped out and locked the door behind him. Hardy was watching him with a surprised expression.

Hardy and three others of the most rational patients listened to Cole when he explained what he had done. These were men for whom reality had slipped, but had not gone. They were intelligent and receptive—and wanted so much to believe what he told them. Each of them had a part in concealing the ampules of cofactor, so they knew he had given the shots. The obvious improvement of the three injected patients was his selling point.

Miss Trask looked up from her desk near the ward door —then gasped when two of the men grabbed her arms.

"Don't worry," Cole told her, "we're not going to harm you or cause any trouble. We just want you to go with us to see Dr. McChesney. We have some news for him."

They unlocked the door and pushed the frightened nurse in front of them, helping along the injected patients who were rational though more than a little confused. The elevator operator didn't argue with the grim faced men, just took them to their floor. Moving fast, the knot of men reached McChesney's office and burst in.

The director started up from his chair—then dropped back with a gasp. Cole pushed Friedman to the front.

"Dr. McChesney," Cole said, "I want you to meet one of your patients, Mr. Friedman. He's been in a vegetable state for two years—until I injected him with my cofactor."

Friedman just stood, blinking at McChesney, his jaw limp. Then he seemed to gather himself together and his mouth worked silently for a moment.

"How do...you do..." he said slowly, in a rasping voice.

Wyckoff, the former birdman, stepped forward of his own accord and shook McChesney's limp hand.

"Very glad to meet you

doctor. I've been in this hospital quite awhile but have never had the pleasure..."

"Help!" McChesney shouted suddenly, groping the phone off his desk. "Operator—quickly—alert the building guards and call the city police! An outbreak—yes, here—in my office..."

It was no use. You couldn't fight a man like McChesney. White would always be white to him. The effects of the cofactor would wear off soon and the proof would be gone. Cole groped for an idea, but he was licked.

"I would cancel that call, doctor," a voice spoke from the doorway. Dr. Viner was there with two guards, but he was waving them back. Walking into the room he took the phone from McChesney and canceled the call himself, then turned back to the waiting room.

"I'm afraid, Dr. McChesney, that we have made rather a grave mistake by confining Dr. Everard. I came up with the guards soon after he did and listened from the hall. I know these three men he has injected, they are all patients of mine. This cofactor works—and works marvelously."

He took Cole's hand suddenly and his voice was hoarse with emotion.

"Dr. Everard, your cofactor is a tremendous discovery; I want to be the first to tell you that. I've worked in mental institutions many years—you've been confined in one so you will know what I mean—what I feel, towards these men and women. That they will be free at last of their terrible affliction.

"I hope we will be able to—well—throw open all the doors.

The patients were on their way back to the wards and a new future when Dr. Viner stopped Cole in the doorway.

"It is a hard thing to admit you have been dead wrong from the start, Dr. Everard, but in this case I don't mind too much. On the other hand, you know that your temper is rather violent, and that is what got you into this trouble in the first place. I really suggest you do something about it. Perhaps consult a psychiatrist?"

Cole started to laugh. He thought Jean Telfan might like to hear that. He would call her—soon.

