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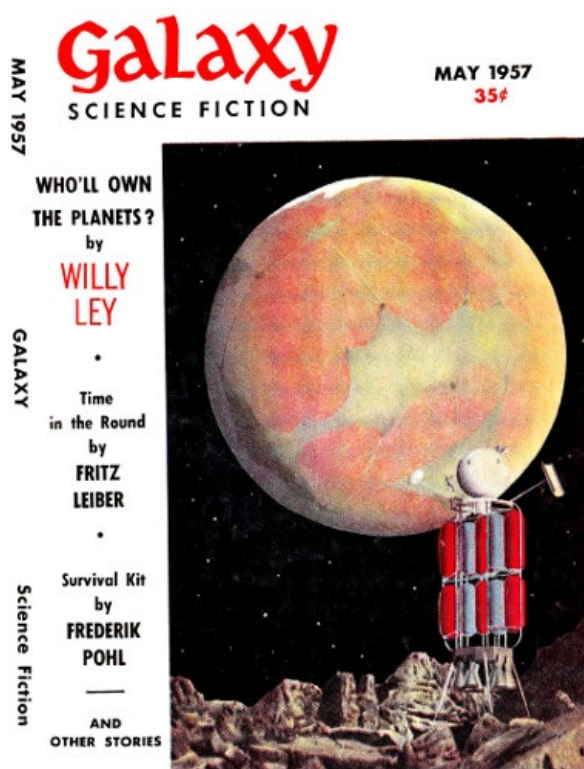
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*** START OF THE PROJECT GUTENBERG EBOOK A TOUCH OF E FLAT ***



A Touch of E Flat

By JOE GIBSON

Illustrated by DICK FRANCIS

**[Transcriber's Note: This etext was produced from
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Warning: never let anyone point any weapon at you; even something as harmless-looking as a water pistol—it may be a Cooling gun!

Most people can find something wrong with the world, and some make a practice of it, but few people ever get the chance to do something about it—and those few usually go down in history with a resounding crash.

Well, it's been rather noisy around here.

From the very beginning, it had been my intention to write this account. But I certainly hadn't intended to write it while residing under police surveillance in the Recuperating Ward of St. Luke's Memorial Hospital. Nor did I expect the interest and encouragement of the police officer who put me here. Nonetheless, Sgt. Nicolas Falasca of the Ohio State Police has been most helpful both in the many long discussions we have had and in procuring the notes and data from my laboratory for the preparation of this manuscript.

But I'm afraid there shall be a considerable lot of me in this manuscript—which, I hastily assert, is not its purpose at all. My apologies for that. Fact is, there's a considerable lot of me, as anyone can see. The term I rather prefer using is roly-poly.

For the record, however, I am duly Certified-at-Birth as one Albert Jamieson Cooling, to which has been added, by my own modest efforts, a few odd alphabetic symbols such as M.S. and Ph.D. I am currently holding down a professorship at a small, privately endowed Tech college, have some mentionable background in both nuclear physics and biochemistry, possess a choice collection of rather good jazz records, have a particular fondness for barbecued spareribs—and, of late, have become an inventor.

If I've left something out, such as horn-rimmed glasses, then, by the point of my little black beard, it must be the wardrobe of 36 sport jackets. Wives? Well, I've been tempted, but a professor's salary can't support alimony.

My discovery of the Cooling Effect itself came quite by accident. But twice now, that accident has almost killed me. It may be argued that this is no more than I should have expected, however, since the invention which "followed naturally" can only be called one thing.

I have invented a new weapon.

That's right—a Cooling gun.

But let it be said that because I was once a war scientist, my inventiveness must therefore tend toward weapons and I should be strongly tempted to reach for the nearest one available. The term war scientist has been used so much, and has grown so commonplace, that it has become universally accepted as the label for anyone who spent as little as six weeks in the old AEC. I was in it for six years, and I voluntarily walked out.

The official policies and inter-agency politics of that era seem of little consequence now, when we have three permanent space satellites circling the Earth and one of them is Russian. We're no longer in a weapons race; both sides have reached the Ultimate Weapon in that contest. Nobody's hiding or betraying classified secrets any more. There's all that silicon-rich basalt waiting to be cheaply processed out on the Moon, if we can only get there....

Back in '69, the official news releases were still boasting how much bigger was each new toy we rolled out of the workshop, how much more terrible destruction it would wreak than the last one. That was hogwash dished out by our PR boys (and, on the other side, by the Reds' Propaganda Ministry) simply because people didn't know any better. Actually, our toys that made the biggest bang were the worst flops as weapons.

You don't conquer an enemy by exterminating him. A hundred million corpses are no problem—just use bulldozers and they're out of the way. But a hundred million living, breathing, freezing, starving, filthy and ragged human beings can raise one hell of an uproar. And they usually do. Some of us felt that we wouldn't need to knock off even a third of Russia's major cities. Much less, in fact.

Dr. Charles Whitney made the mistake of saying so. And they canned him. The scuttlebutt was that Doc's conscience backfired. I know better; I saw the explosion. It was his patience, not his conscience.

Anyway, I turned in my resignation two weeks later. I walked out, kept my mouth shut and settled down to a small college professorship. I mention these events now simply because I believe it was there that the development of the Cooling gun actually started.

I had begun to see what devastating weapons could never achieve. They *had* deterred warfare, at least up to that August of 1969, by their threat of utter destruction—and perhaps Whitney deserved to get canned—but they offered no guarantee for the future. And they couldn't liberate a conquered nation or protect people from a dictator's secret police.

It was time we had something better. (We did, of course, but only a small part of the AEC was in on the development of atomic rockets.) Until we did, I could sense that we were simply going through the motions.

But it all began to go places fast with that cold research we were dabbling in, last semester. In fact, it was my fault that General Atomics tossed that little problem into our Cold Lab here at Webster Tech—my own past service in the AEC, my rather unusual background combining nuclear physics and biochemistry, and the post-grad crew I've managed to accumulate under my professorial wing.

The whole deal was shoveled obligingly into my Christmas stocking and the rest of the faculty obligingly left me to play with it—providing I continued to conduct my regular classes, of course.

Perhaps it's just as well I kept my hand in, though, because that line of research got rapidly nowhere. We found that materials which have their temperatures reduced to near-absolute zero are just plain cold. Bring them into room temperature and strange things happen sometimes that isn't just them trying to warm up. It isn't friction-loss and it isn't radiation damage and it isn't entropy.

It shows.

There's a band of radiant energy somewhere between ultrasonics and radiant heat that hits fast and goes deep, and comes out just as fast, and it gets triggered off by whatever this is that happens with near-absolute zero objects subjected to room temperature. But the whole thing is so negligible that for most practical purposes it can be ignored.

Finding *that* out cost General Atomics thirty thousand dollars, but our kids in the Cold Lab had a ball rigging the Mad Scientist's super-disintegrator gizmo that reproduced the phenomenon.

Then, that night—it's nearly four months ago now—I was alone in the lab, just switched off the lights, about to close up and go home. And I stumbled over the corner of the thing. Scrambling up, somehow I put my foot into it. And reaching out to grasp its frame, to steady myself, my hand hit the switch. It went on and I went out.



It was still on—I thought—when I regained consciousness, spraddled out on the concrete floor. I pulled the switch open and jerked the cord out of the wall socket.

When I got home, there wasn't a bruise or a bump on my noggin. Nor the faintest sign of a burn anywhere on my foot or leg or even on the sole of my shoe.

That was a Tuesday night.

The next day, the lab remained closed. But that night, I went in, switched the lights on and studied the machine. It showed absolutely no sign of damage, no burned insulation, nothing. I stuck my hand into it and closed the switch. It came on with its usual quiet hum. Nothing happened.

It was almost a week before I heard that the janitor was still wondering who'd blown all the campus fuses on Tuesday night. Then I remembered that I hadn't switched the lights back on when I regained consciousness.

I had been blinded when I switched them off, had stumbled over the machine, fallen, all the rest of it. But I'd come to with night vision, naturally. I saw well enough then by the moonlight streaming in the lab windows. All the lights—the machine, too—could have been off, with the fuses blown, without my noticing it. I had assumed the machine was on because its switch was closed, had opened the switch and jerked out the cord plug.

What happened had therefore required a tremendous spurt of juice in the circuits, or else a heck of a lot less juice than we carry in our lab outlets. So I took home the prints on the rig and began making changes. Which led to more changes. Which resulted in some rather complicated mathematics to which we scientific chaps resort when the kind we teach in colleges just won't work out right. I got it: a very low power-input. And I got more.

The thing is a sort of invisible ray. It can only be emitted, or broadcast, as a narrow beam from the muzzle-coils of a very fancy-looking electronic rig. Low power is a must; more juice not only heats up the rig and smokes insulation, but it won't shoot the beam.

I tested it on the black tulips (Biochemical Research Project 187) which I got to close up by the clock, not by the Sun, last year (Project 187-A) and their blossoms closed each time the beam touched them. The purple mushrooms which fluff their tops in radioactivity showed no effects.

It works on a simple "A" battery. But there's a transistor hookup that behaves like no transistor. Its molecular structure vibrates, which it shouldn't, and emits a sharp, keening note in the vicinity of E flat. A rather bulky muffler would be required, I'm afraid, to get rid of that noise.

But the oddest thing, technically, is that invisible ray-beam. It hasn't any of the effects of electric shock. I'll not go into the electro-neurological aspects of that—nobody could understand it except, just possibly, a neurologist—but the simple fact is that this ray puts a victim to sleep instantly *and it doesn't do anything else!*

No blockages or convulsions of nerve ganglia, not even a temporary catharsis of "mild" shock! Apparently it gallops up the "white matter" of the nervous system quite harmlessly, then smacks the "gray matter"—the brain, the spinal column—a good wallop. Painlessly.

In short, the victim just flops over and snores up a half-hour or so, and then awakens as if from a short nap, though perhaps with some puzzlement. There is no injury whatsoever.

Naturally I wanted to find out how the Cooling Effect worked and why—though I may never learn *what* it is. Hypnosis? Artificially induced, instantaneous sleep? (Victims can be handled without awakening.) Of course, I was curious. I'd have gone through it step by step for my own satisfaction, even if somebody else had already done it before.

Nobody had—and it wasn't easy. During the rest of the term, even through final exams, I devoted every spare moment to the Cooling Effect. Even so, it took another two months' hot sweat—the summer vacation's practically gone now—to get those final diagrams onto my drawing board.

But once I did, there it was, at least its basic circuits and components. All I needed was to juggle them around, coax them into a slim, tubular case, put a carved butt on it containing the "A" battery and give it a push-button trigger. With that data, any good bench-hand in an electrical repair shop could have done the job. I fashioned it out of plastic and odds and ends in my basement laboratory.

A glance in the telephone Red Book gave me the number of a local breeding farm and a call soon brought a pair of fat, inquisitive guinea pigs in a small, wire-screened carrying cage. Beyond the patio wall, my house sides directly on open pasturage, and beyond that, lower in the valley, the alfalfa field begins. With a brisk pacing off of a base-line and some rough, splay-thumbed triangulation, I soon determined my new weapon's effectiveness from point-blank range to a thousand yards—on guinea pigs, that is.

At nine hundred yards, it still knocked them over for the count. At a thousand yards, it had no effect whatever, so far as I could determine through field glasses. The animals gave no sign that they even noticed it. That, plus the nature of the mechanism, indicates its application is definitely limited. Whether you make it small enough to fit a lady's purse or as big as an atomic cannon, its maximum effective range will still remain 900 yards. And not just on guinea pigs.

I already knew from my own experience what it does to a man at close range. Blowing the fuses on the whole campus had been the real danger there, however. Had it been the slightest bit different, even to the position of my foot in that big machine, I should certainly have been electrocuted that night.

That was the first time it almost killed me.

The Cooling Effect is worthless as an anesthetic for surgery. While the sleeping guinea pigs don't awaken when I pick them up out of their cage and handle them, even pulling their legs, they do struggle. They resist, like sleeping animals, not wanting to be disturbed. Still, I pinched them and bounced them and they invariably slept through an approximate half-hour. It's shock, and it isn't. It's sleep, and it isn't.

But I certainly knew it was a weapon. A new weapon. And man alive, *what* a weapon!

I turned the guinea pigs loose in the patio, let them scamper, then tumbled them both with a quick sweep of the beam.

One man in ambush could knock over a whole company of marching troops!

The guns could be mounted on tripods with a rotating mechanism that kept them sweeping the area constantly. Anyone who approached within 900 yards would go down—then wake up, climb back to their feet, and go down again every half-hour. Man or animal. The guns could be strung out to cover a whole sector, then wired to a single main switch—and one lone observer could stop an infantry advance.

But they wouldn't stop guided missiles or even mortar fire. Nor would they deflect through peepholes on a tank or pillbox. There isn't quite that much "scatter" from the beam reflecting off a hard surface. However, there is some—I fired through the wire-screen openings of the cage and had the beam glance directly off the back wall, often knocking the guinea pigs down without hitting them directly. It went through a handkerchief easily, even when folded thick. A thin glass tumbler, however, stopped it.

You could take cover from it almost anywhere—if you knew when you were going to be shot at. You could wear a light plastic armor—if the joints were sealed and you kept it hooked to about a fifty-pound air-condition unit. No problem at all if you ride a motor scooter.

It wouldn't stop an invading army, but it could certainly raise the devil with the occupation. Almost anyone could make the gun. Given the components of a pocket radio, a few pieces of copper wire, a few sticks of chewing gum and a penknife, I could whittle one out of wood or put it into a plastic toy water-pistol.

But what the Armed Forces *don't* want right now is a new secret weapon! They have their manned satellite now, keeping its vigil over the arsenals of Earth, their big atomic missiles ready to jump off against preset targets—but with the frightful unknown of deep space chilling their backsides.

And, too, I can imagine trying to sell those Generals on something that won't even stop a tank.

I'm afraid I forgot to shut off the kitchen monitor that night. The servos dished out the dinner menu I'd dialed before noon, then whisked it away when it got cold. I noticed it when the waste processor's stuttering hum went on a bit longer than usual.

I realized all too clearly what a predicament I was in.

The Armed Forces would undoubtedly suppress my invention. Their lives are nightmarish enough already—not knowing what they'll find out in space or how it will affect matters. What's more, they would suppress *me!* There are certain retroactive clauses in that contract I signed with the AEC which would do the job with complete legality. A nice little hideaway, then, with nothing for miles but security guards, radar traps, trip-wires and electric fences.

But that was the kindest fate I could expect. Quite a number of assorted big and small dictators might like my head blown off.

The most obvious alternative was to suppress the invention myself. To destroy all traces of my experiments and forget about it. To convince myself the world wasn't ready for it.

It's quite possible I might have—if I hadn't kept forgetting to shut off things—and if not for an unsavory little group.

There is small chance that Big Jake Claggett and his three henchmen will ever be remembered for their unwitting contribution to science and the future of mankind. In fact, their contribution can be accepted as the merest coincidence—unless you discount Big Jake's liking for foreign sports cars. But that came later.

We always have had criminals and crime, and it just happened that Claggett's gang were the big news that day. It could as easily have been some other bunch of crooks.

Anyway, when nine P.M. rolled around, my wall TV burst into its customary serenade of sound and color, timed for just enough of the opening commercial to let me settle down to watch Mr. Winkle's news commentary. It was August 23rd, 1979. At two o'clock that afternoon, Big Jake Claggett and his gang robbed the Bellefontaine County Savings Bank and got away with \$23,000.

One of the gang clubbed the elderly bank guard senseless with the barrel of his revolver. The guard was hospitalized for a possible skull fracture. Witnesses said Big Jake cursed the gunman who struck the guard, warning him to "get hold of himself!"

That was enough for me. The world had to be given my new weapon. (I'm even more convinced of it now, after discussing it with Sgt. Falasca. Practically every professional criminal in this country would give almost anything for the Cooling gun. Then they could commit armed robbery with no risk of earning a murder rap!) I could see that both criminals and police officers would welcome it and for one simple reason.

It doesn't kill, maim or injure. Even if it should cause a tremendous increase in robberies and similar crimes, its victims wouldn't be dead. Better a hundred robberies than one man's death.

Besides, I had a notion that I could discourage its criminal use.

First I had to prevent its suppression. Solve that problem and there wouldn't be any reason I couldn't manufacture the pistols, advertise them, and sell them exactly as any firearms company can sell .22 rifles. Except that I should probably do better to arrange for their manufacture by some established firm.

That was when I began planning to write this. There is just one condition under which no secret can be suppressed—*when it ceases to be a secret!*

It took preparation. The roughed-out diagrams and scribbled notes a man uses in research are hardly suitable for publication. Technical specifications had to be phrased in clear, understandable terms. The complete data took nearly two weeks to reach final draft. Also, it seemed best to establish the importance, and at least imply the probable consequences, of this publication.

And then, obviously, I had to find a publisher.

That one had me stumped.

Furthermore, I suspect it might still have me stumped if I did not now have the full support of the Governor and the State Police of Ohio. *These police officers want Cooling guns!* But even back then, while I was still the only man on Earth who knew about it, I managed to formulate a solution of sorts.

Any publisher would be scared of the thing while only he and I and the printers knew about it. He'd be risking a Federal injunction, at the very least, even to consider publishing it.

But if it were no longer a secret and simply not yet *common knowledge*, most publishers would grab it. If, for example, some manufacturing firm had already considered it and was planning to put Cooling guns into production....

Dr. Charles Whitney is currently the president and chief stockholder of the Cleveland Atomic Equipment Company, which designs and manufactures special tools and equipment for nuclear power companies, radiation labs and universities throughout the Midwest. He started the business after his dismissal from the AEC and built it up gradually over the ensuing ten years. We have some of his tools at Webster Tech.

Then, too, Whitney and I had maintained a cursory, but friendly contact through the years, so naturally I thought of him first. He had the production layout for the job; what's more, he had the guts to go through with it. All I had to do was sell him on it.

Unfortunately, by then I was scared silly. I was the furtive, sneaky little man whose invention would change the world. I contacted Dr. Whitney with a simple televisor call—but instead of suggesting a perfectly normal appointment at his office, I had to swear him to secrecy and arrange a clandestine meeting in the country! I wonder he didn't consult an almanac to see if there wasn't a full moon that night.

In fact, I wonder that he came at all. It was pouring rain.

At least six hours are still required to reach Indian Lake in dry weather, even allowing the Federal Freeway's 125 mph speed limit. Once through the Columbus Turnoff, you have to double back westward and northward through a hilly, rural country with twisting county roads. You must have excellent driving ability to average more than 30 mph—and it won't be much more—over that maze of roads. When they're wet, you need driving ability just to stay on them.

I'd worked late the night before, arranging my material for this meeting, and didn't arise until noon. One glance at the sky's heavy overcast told me what to expect. The weather reports confirmed it.

The world proceeded about its own business, of course, thoroughly indifferent to a worried man eating his belated breakfast. I was so completely *alone!* If I felt any sense of foreboding, stuffing articles into my pockets, picking up the guinea pigs' case and going out to the car, I couldn't distinguish it from my feeling of gloom. Perhaps I did, since the world's affairs caught up with me quite forcibly that night.

I met the rain before I was halfway up the Freeway and had to cut speed clear down to 85.

The old hotel on Indian Lake was my natural choice for a rendezvous, since it was a gutted ruin in abandoned backwoods—though "abandoned" isn't exactly true. Local residents still fish the lake and there are a few homes around the shore area.

Strictly speaking, the region has simply changed with the times. Today, you can't get past the toll-gate onto a Federal Freeway unless you have a Federal Driver's License and your Vehicle Inspection sticker is up to date—which changed more things, I think, than nuclear power and industrial automation.

When people suddenly couldn't drive across the country in any junkheap with a nut at the wheel, it became a mark of distinction just to *live* in the country. That's what made more rural jobs—the small community shopping centers springing up, products having to be shipped out to them, the growth of rural power and water systems—when work in the cities got scarce, with automation

taking over the factories.

But it hit the small resort areas especially hard. More people are vacationing in the cities now than at the seashore or mountains!

I hadn't been out to the lake in years, but I had less trouble finding my way this time than ever before. The influx of new home-builders has considerably improved the road signs around there, both in number and accuracy, and that's all you need in a Porsche Apache. My little blue speedster takes those narrow, rain-slicked county roads like a Skid Row bum making the saloon circuit with a brand new ten-dollar bill. The only real problem is getting around those armored Detroit mastodons that can't decide which end is the front.

Anyway, driving kept me too busy to think much of anything else. But I made good time—better than I expected—and it wasn't long after dark when my headlights cut through the sheeting rain to pick out the fire-blackened ruin of the hotel.

I jounced the little Porsche around the deep-rutted drive and parked next to the empty frame building that had once been the restaurant and bar.

I had plenty of time to think, for Dr. Whitney didn't arrive until two hours later.

It was sometime during those two hours that the Claggett gang smashed their way through a police roadblock just outside Lima, their guns blasting reply to the machine-gun bullets peppering their big sedan. Two policemen were seriously wounded; one died on the way to the hospital.

Shortly afterward, the bullet-riddled sedan was found by the roadside, but only one of the gang was in it. He was dead.

And some time later, a call aroused Sgt. Falasca from a sound sleep. He didn't even take time to don his State Police uniform, but merely pulled a trenchcoat on over his pajamas, got his revolver out of the bureau drawer, and kissed his wife on the way out the front door. He had three other State Troopers to pick up, off-duty as he was, before proceeding to the assembly point at Lima.

The Claggett gang had split up, some of them probably wounded, each of them armed and more dangerous than ever. They were wanted for murder now.

Dr. Whitney made the trip by helicopter, of course—the head of a scientific instrument company must keep up appearances. He'd waited as long as he could, hoping the weather might clear, then had taken off on instruments and reached the lake by ADF gridmap. He settled to the lake surface and crept in to shore, his landing lights probing the thick curtains of rain.

I heard the hollow roar of his turbine, rather than the throb of his rotor blades, and hurried around the slanting wing of the old hotel to meet him. The lakefront presented a macabre view that wrenched at my memory. The desolate, cracked-stucco walls with the black holes of their windows rising from mounds of rubble beside me, a weed-grown lawn and a straggle of trees half-masking the lake—stark-looking trees now, in the 'copter's landing lights—and a small boat-dock leaning half into the black water.

Once, as a rather obnoxious young high-school student, I had seen this lakefront on just such a night. A steady rain fell, lightning flickered, and thunder blasted its anger ... and, for a moment, I saw it as it had been, with that grand old British pioneer of space flight, Arthur C. Clarke, standing out there in the pelting rain with his camera, taking pictures of the lightning!



Dr. Whitney brought his sleek craft over the treetops and settled neatly into the small space that remained of the lawn, his rotor tips almost nicking the crumbled walls of the hotel. It was a plexi-nosed, three-place executive ship—a Bell, I think. A lot of people prefer flying. They must fly specific air routes and airfield traffic patterns; and with airfields so crowded, they have trouble finding a place to park. It's not for me.

But Dr. Whitney had heard the newscasts on the way out. I don't recall what was said at our meeting. It was rather uncomfortable, under the circumstances—the more so for me, I think, as those circumstances were my own making. But when we'd rounded the hotel and entered the old

restaurant-bar, I recall Whitney's jocular approval.

"Well, we're cozy enough here," he said. "So long as the Claggett gang doesn't drop in on us!"

That was how I heard of the night's happenings. When he saw that his remark puzzled me, he related the news while I was setting things up for our conference. We were in the back room, which had once been the bar—the front section, formerly the restaurant, had had windows all around, which now formed an unbroken gap with a chill wind whistling through it. The place was stripped bare of its former fixtures, but some unsung fisherman had provided the old barroom with a rickety table and several pressed-board boxes to sit on. I had a Coleman radiant heat lantern which I swung from a ceiling wire hook, a plastic sheet which I threw across the table, and a couple of patio chair cushions for the boxes.

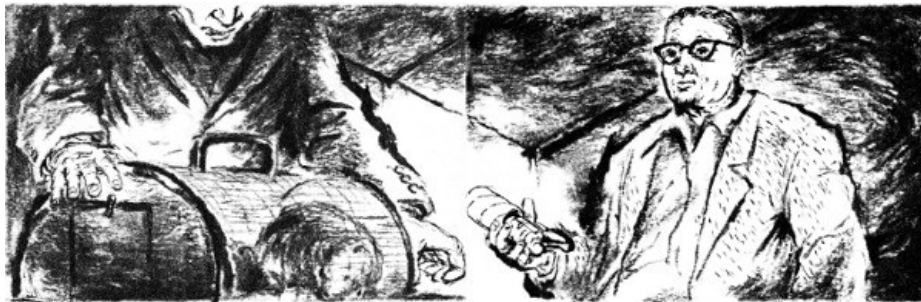
It took some shifting about to get everything out of the way of several roof leaks, and I had to choose a sturdy box for myself, first testing a few.

I can well imagine the thoughts and emotions struggling through Dr. Whitney's mind then, but he showed none of them. It was I, rather, with my clumsy movements, the pauses to polish my glasses, the lump I kept trying to swallow, who took so long to face up to it.

But finally we were ready. I took out my notebook and opened it upon the table before me. Whitney's frosty eyebrows raised. Then he quietly reached inside his own topcoat, produced his notebook and pen, and laid the notebook open before him. It was a gesture of an almost-forgotten past, but a habit neither of us had ever abandoned. Something about it—the reminder of countless AEC conferences we had both attended—had a steadying effect on me.

I placed my pistol in the center of the table. The guinea pigs' cage was on the floor before us. I told what I had to tell.

Then I went to the cage, removed one of the animals and tucked it into my pocket. Returning to the table, I picked up the pistol and fired at the cage. The shrill E flat note pierced the rushing sound of the rain.



Whitney rose and went to the cage. Gently removing the little creature, he felt it a moment, then nodded.

"Asleep," he said, and replaced it in the cage.

Looking over my notes, I see that considerable space would be required to cover the entire interrogation which followed. Also, I see that I failed to note down the almost gradual change in my old friend's demeanor—from his calm, quiet manner at first to the keen-eyed excitement of his flushed features, his rapid-fire questions at the end.

I shall, instead, give some examples of that discussion.

"The guinea pigs sleep for only a half-hour? Always a half-hour?"

"Yes. It never varies much. A minute or so each way."

"If you—uh—shoot one, then shoot it again, does that prolong its sleep any?"

"Not at all! Still only a half-hour, no matter how many times you shoot them while they sleep."

"Ummm. That could indicate sleep is the brain's defense mechanism against the effects of your ray. A successful defense, it would seem. They show *no* after-effects of this?"

"None whatever. They've begun to associate it with the pistol, though. Each time I point the pistol at them, they get mad—"

"You mean angry? They aren't *afraid* of it?"

"Certainly not afraid! One in my pocket here tries burrowing into corners, making furious grunting sounds. The other one usually just stands and glares at me."

"How about when they wake up?"

"Well, generally, their first reaction is to keep a sharp eye out for me—and the pistol."

"Wary, eh? Damned inconvenient, I suppose, getting knocked asleep all the time. But it certainly doesn't seem to hurt them. What about mental disturbance?"

"No obvious aberrations. But I don't know—"

"Yes, they're only guinea pigs. Hardly be satisfactory to the American Medical Association, among others. Take years of research to determine its absolute safety—"

"But it should be released to the public now!"

"Why?"

"Because its harmful effects, if any, are very likely to be insignificant—or we'd have no doubts about their existence."

"That assumption *could* be dangerous."

"Yes. But there's something else, too. This new weapon will replace firearms—which certainly *do* inflict injury, even death."

"Ah, society's application of it—" And Dr. Whitney took several minutes to digest that aspect.

I outlined my plans to him.

He was incredulous at first, then frankly aghast. "You expect me to *mass-produce* that thing?"

I said I hoped he would.

He then commenced raking me over the coals in a most fitting and proper manner. Didn't I realize what I had created? My visions of it freeing peoples from police-state enslavement were all fine and good, and it might conceivably have such result; but what I had here was nothing more than *the most fiendish instrument ever inflicted upon human society!*

What did I think it might do in the hands of muggers, sex offenders, pickpockets, burglars or worse? Why, our whole civilized culture would be thrown into chaos! No person would dare ever be alone, for fear of ambush. No one could sleep without someone else standing watch! No man could defend his own possessions, no woman could keep her chastity, unless people were around them, watching them *every moment of their lives!*

Goods could no longer be transported without heavy guard. The wealthy—who could afford it—would have to live in massive, well-guarded fortresses. The rest of us would be like the feudal serf, with nothing worth stealing and quite accustomed to having his daughters raped. *We'd be thrown back into the Dark Ages!*

I nodded agreement to everything he said.

Then I took the guinea pig from my pocket, held it squirming, and fastened a little collar about its neck. I unwound a wire from the plastic disc on the collar so Dr. Whitney could see it. He instantly recognized the tiny node on the wire as a miniature microphone.

"Remember how you determined that the other pig was asleep?" I asked. I taped the tiny node to the artery on the pig's neck, carried it over to the cage, and placed it inside. "I call this my 'Hey, Rube!'" I explained, grinning. "But imagine it as a little wrist radio transmitter, worn by everyone who requests them, tuned to the police broadcast frequency. Radio DF could pinpoint the location in seconds."

Going back to the table, I picked up the pistol. "This one's just for demonstration," I added, and fired at the cage.

As the guinea pig slumped beside its companion, the disc on its collar emitted a harsh, buzzing noise.

Whitney chuckled. "Slowed heartbeat, eh? Simple as that!"

"And better than any burglar alarm," I pointed out. "This one needn't sit still while some crook disconnects it!"

He pointed out, of course, that this might destroy its usefulness to people in a police-state. The dictator's police and troops could wear "Hey, Rube!" radios, too. I replied that all the people's underground fighters would need is a Cooling pistol and a saw-edged meat knife. One man could knock over a whole platoon and cut their heel-tendons in minutes. "The American Indians used to collect scalps in less time!" I said. "But a wounded man's more trouble to the enemy than a dead one. I think the heel-tendon would be easiest."

Perhaps it was a bit out of character for me. Whitney looked at me for a long moment, and blinked. Both eyes, tight.

But still he didn't think much of my plans.

His subsequent suggestions were far more rational, however, than the ones I had evolved through fear.

First, we didn't really know the Armed Forces *would* suppress this gun. They were completely involved in their problems of space flight and military satellites; there probably wasn't anyone left in Washington who was even looking for secret weapons now. And we just might get this gun through while they weren't looking.

He suggested, therefore, that I attempt to patent my invention. But that we should take adequate safeguards: I must handle all patent correspondence through his office. Then, if the Armed Forces clamped down, they'd come there first—and he could tip me off in time to escape. I'd have to flee the country. But at least I'd be free and we could adopt other measures for bringing out the gun.

It would be pointless now to disclose what other plans and arrangements we made. It's enough to say I agreed. The discussion then turned to further speculation of what the future might be with the Cooling gun.

Whitney was not at all convinced it would be good, but, rather, that neither we nor any group of men had the right to decide what humanity should or should not do.

He had strong doubts that it would mean the end of dictatorship. "Dictators dream world conquest, and dreams like that breed war," he said. "But they aren't the only ones to blame. You'll find people who *like* dictatorships!"

But the truth was that most of humanity didn't want to get involved, never realizing that that involved them more than anything else could.

It was at approximately this time, so far as I can determine, that Big Jake Claggett and one of his henchmen walked up to a service station where a Porsche speedster was getting gas. They clubbed the station attendant unconscious, hauled the driver out of the little sports car and took off in it.

Dr. Whitney left me with a problem. What could be done to keep people alert? It is this one thing that will determine the Cooling gun's effect on the world—whether as an instrument of crime or protection for the weak, the innocent.

Where people are complacent, it will be a boon to thieves and revolutionaries.

Where people are alert—

But what could keep us alert?

Driving back, I was preoccupied, hardly conscious of the little car's deft progress over the slick roads. It was almost with a feeling of detached interest that I saw the black skid-marks at the bottom of the hill—then, with chill shock, the dark bulk of the sedan on its side in the ditch.

I was slowing when a flashlight beam raked outward from the car, showing crumpled metal and broken headlights. One figure, perhaps two, were standing behind it. Another one, a man in a trenchcoat, mud-splattered almost to his hips, was walking onto the road in front of me, flagging me down.

"Get out of that car!"

There were exasperation and rage in his voice, an expression of utter fury on his face. He stood just at the edge of my headlights' glare, not directly in it, with his hands thrust deep in his pockets.

There was that. There was the speed of the sedan, as evidenced by its skid-marks. My mind leaped instantly to one nerve-shattering conclusion—

And I felt absolutely calm. I can't explain that. It may have been that the night's events had already drained me of tense emotion.

They're armed, I thought, but so am I! And I have a weapon that can get them all with one sweep

This, while I opened the door and climbed out. While I thrust my hand into my own pocket.

I whipped out the little pistol.

One instant, he was standing still, hands thrust in the wet trenchcoat. The next, a heavy revolver exploded at his hip. A sledgehammer caught me in the right side, knocked me reeling.

It occurred to me then, lying there on the road, cold rain pelting my face, a warm wetness spreading along my side. I had met the one pitfall we shall never escape in a pistol-packing society: the man who's faster with a gun than you are!

Bending over me, Sgt. Nicolas Falasca picked up the little plastic Cooling gun and straightened up, peering at it, scowling. "What the hell!" he muttered.

I was rather inclined to agree.

Naturally, this had to be told. The State of Ohio wants Cooling guns for its police officers; after this, other States will undoubtedly follow suit. The Armed Forces don't want to suppress it. And

Dr. Whitney will start production in just another week.

They've been very decent about paying my hospital bills and seeing that nothing else happens to me.

Even though Sgt. Falasca was saddled with the latter responsibility, I must repeat that he's treated me very well. The future will depend a lot on men like him.

As for the rest—I've been assured that the guinea pigs were honorably retired to the breeding farm; Nurse wouldn't let me keep them here. Everyone knows of the violent end of the Claggett gang.

I want to state vigorously at this point that, despite widespread public belief, neither I nor the Cooling gun had anything whatsoever to do with it. I never at any time even saw Claggett or any member of his gang. Their unwitting contribution was the alerting of Sgt. Falasca and the rest of the police, and, as I mentioned at the beginning of this account, Claggett's stealing a Porsche like mine because he was fond of sports cars.

That's the whole of the story, except for one additional item:

This is scheduled to appear at the same time as the plans and specifications for the Cooling gun. You'll find them given as premiums with safety razors, breakfast cereals, cigarettes and other articles. I wish to thank the manufacturers for their kind cooperation.

*** END OF THE PROJECT GUTENBERG EBOOK A TOUCH OF E FLAT ***

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