

The SINGING WEAPON

- By Bent Prout -



It was as though his muscles had been changed into steel springs, drawing his bones the wrong way. The agony was insupportable. Without being able to let go, he still clutched the Vibranon in his left hand.

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FEODORE KELINEV'S passionate desire to have his son Josef become a musician was one of those insignificant causes which produce most startling results. Its effect on the lives of both father and son during that crucial year of the Yellow Holocaust had long since been forgotten, but it was the real reason why both men came to play such an important part in the near tragedy following the Asiatic invasion of 1945.

Three years before the war Josef was twenty-two. He had graduated from Columbia University with honors in mathematics and science. At his father's insistence he had paralleled his university course with violin instruction. But his heart had not been in this study, and when finally he came home with the coveted B.Sc. degree, Feodore personally took over the details of his son's further musical education.

Feodore at twenty had played with the Boston Symphony orchestra. A cellist, he loved music with all the fervor born of generations of Polish masters. That Josef had none of his intense feeling for music; that he preferred calculations and formulas to the intricacies of an immemorial polonaise, was the old man's heaviest burden.

Josef, who loved his father and desired to please him, set his fine mind to the unpleasant task of learning to play the violin. He would practice for hours with his father at the piano coaching, exhorting, criticizing, while his son played—always without feeling—like a cold mechanical automaton.

One hot day in August, 1943, Feodore reached the limit of his endurance. Josef could not catch the spirit of a finale which ended with a trill of high harmonics. Suddenly, the old man crashed both hands down on the piano keys and shouted: "Josef, you learn nothing. Always you do it the same. As a foolish donkey braying at the moon. Oh, if I could only show you. Here. Let me have the violin."

The old man rose and took the instrument in his thin, bluing hands. Like most cellists, he could play the violin, though being accustomed to the longer reach of the cello, the operation was laborious and often grotesque. He knew, however, what he wanted to hear, and as he played the approaching passages a smile of satisfaction crept over his features.

Up the ebony fingerboard went dancing fingers while the bow steadily drew out the loved tones. The difficult passage was only a few notes away. Feodore felt that he was doing it exactly as he wished Josef to do it, and for the first time in months was really happy.

Softly the old man's fingers reached for the harmonic, produced by allowing the fingers to barely touch the string instead of pressing it down firmly. But here the hands,

used to the feel of larger strings, became hesitant. They groped. The bow still grated over the string but no sound came.

Sweat poured from Feodore's forehead and a flush lifted over his gray-stubbed cheek. But he kept on.

Suddenly a note shrilled from the instrument. A queer squeak of a note which was so thin and harsh it set the nerves jangling.

And at the same instant, a curious thing happened.

Josef's mother, who had not been an artist but imbued with an artist's love for beauty had, while traveling almost the world over with Feodore, made a famous collection of Venetian glassware. Included in the collection were two vases she had prized most highly.

Since her death, Feodore had placed them on top of the piano as being the place they would least likely come to harm. He knew their value, and while he did not fully appreciate their iridescent beauty, he cherished them for their association with his wife.

As his groping fingers drew that weird harmonic from Josef's violin one of the precious vases cracked squarely in two, and one of the halves rolled off the edge of the piano top, clinked a couple of keys as it fell, and shattered on the floor.

Feodore was aghast at the accident. But Josef sprang into instant action.

"Father. For God's sake don't move your fingers. Try and make the same note again."

Feodore, startled by his son's command, did not move his fingers. But he hesitated to draw the bow over the string.

"Try it again I tell you." Josef's voice held that hard note of driving power which makes men hurl themselves to death at the desire of a leader, and the old man's resistance was weakened by a sort of terror. Mincingly

he tried the note again.

The other vase, which Josef had hoped would crumble, rang with an answering note but did not break.

“Damn it. You didn’t do it right. Try it again.”

But Feodore had recovered himself and refused to make further attacks on the family heirlooms. Instead he began to bemoan the broken vase.

“Your mother thought a great deal of that pair of glasses. What would she say if she knew one of them was broken? And I didn’t show you how to do the notes. I am sad, Josef, very sad.”

But Josef apparently did not hear. He had taken up the violin and was reaching for the same harmonic. He found he could get the vase to resound to the note, but he could not break it. He tried other notes on other objects in the room. Once he found a note which made his father wince with pain.

“What the devil are you doing, Josef?” Feodore growled. “I could feel that sound tingle through my whole body. For heaven’s sake go out somewhere. I’ve been tortured enough.”

Josef went but he carried in his mind one of the most potent germs of genius man has ever known. He had discovered through a music lesson an application of the principle which was to make him a national hero, a savior of his country, and finally a martyr to his own ingenuity.

He never took another music lesson. From that moment he devoted his every energy and thought to perfecting the idea which was to completely revolutionize warfare, which was to rid United States shores of its most successful enemy, and which was to place in the hands of the government a weapon so powerful as to make other wars impossible unless his own country should choose to wage them.

THE declaration of war on the United States by the United Asiatic nations came with the suddenness of a thunderclap. Newspapers announced it one Sunday in June, 1945. It found the country entirely unprepared, going about its accustomed business collecting the dollars, which it felt were enough to prevent other nations from daring any sort of an attack.

A month before the declaration of war a Washington “*Times-Union*” editorial writer said in part:

“Alarmists would have it that we are in danger from the yellow races. Woefully shortsighted as their troublemaking minds are, they do not see that war on the United States would be impossible for the reason that no nation has enough money to conduct war one year except ourselves. The United States Treasury holds the purse strings; which are the heartstrings of the world.”

Nevertheless, the puppet refused to obey its string. War came. A new kind of war which descended with the implacable suddenness of a tornado. And it immediately appeared that the Asiatic nations would not need much money. At the rate it started, the war would be over in less than a year.

The first attack was launched at San Francisco, and a few hours later at the Panama Canal.

As day broke over the San Francisco harbor, amazement was turned to horror as a fleet of ships appeared hovering just within sight of land. The ships were larger than any ever seen before, and were apparently so equipped that they were not affected by the heavy sea that was running toward land. They were as stationary as though piles had been sunk to the bottom of the ocean and they were resting on them.

From each of the warships a huge aeroplane rose and sailed out across the sky. There were a dozen of them.

Sleepily awakened from peacetime

routine, crews of coast air defense batteries started firing. But the planes, despite shells breaking near them, made no effort to rise above range, and none of them seemed to be damaged in any way.

United States planes went out in gallant formation to meet the enemy. But they could not fly in that barrage, and the others could.

Over the city, the enemy planes seemed to halt in midair. Observers on the ground thought something had happened to them, and that they would soon come tumbling to earth. Then it became obvious they were equipped with helicopters enabling them to remain stationary in the air, and aim their bombs with the same accuracy as if they were shooting them from a fixed position. Each one of them sent a bomb hurtling to the ground.

But there was no thundering explosion, no upheaval of earth, no mangled bodies thrown into the air. For a few seconds there was a hiss of escaping gas, an acrid odor, and death all around.

Within five minutes there was no vestige of life anywhere within a radius of 2,000 yards of each bomb. The gas seemed almost under control, as though some evil spirit in each steel container was directing it to destroy.

A dog, frightened by the first bomb as it fell, was the first victim. He started to run madly. The gas caught up with him. He coughed once and dropped dead in his tracks.

Persons running out of houses to see what it was all about, fell before they could regain their homes. Pedestrians, running for cover, were caught before they could reach the shelter which would not have protected them.

About fifty bombs were dropped over the more congested districts of the city. Then the planes moved gracefully away, back to the decks of their mother ships.

The ships, as impervious to

bombardment from the coast batteries as the planes to antiaircraft guns, weighed anchor and steamed away.

The lives of 50,000 were lost in San Francisco alone within half an hour. Within another hour the Panama Canal Zone was cleared of life and its locks and mechanisms left to be manned by little yellow men already trained for the work by spies.

Panic stricken, a stream of harried refugees poured inland as fast as transportation could be devised. They left their dead behind.

Newsgathering organizations, filling the Eastern press with column after column of the horror, declared that the enemy could not be repulsed for the reason that ships and planes were protected against gunfire by magnetic shields. Bullets and the steel of bursting shells were deflected by an invisible screen before they could do any damage.

No wonder the planes were not disturbed by antiaircraft guns, or that the ships were not routed by the supposedly invincible coast defense. No wonder the enemy was content with the ravages of a couple of hours, and had withdrawn to rest upon, his laurels.

Everyone began to conjecture what the next move would be. They were not long kept in ignorance.

The attack was scarcely over long enough for word of it to reach Washington when a wireless telephone signal from an unknown source was received by the operator at the Capitol. A voice asked for a connection with Secretary of War Roger L. Bates.

The United Asiatic nations wished to negotiate with United States officials.

Secretary Bates called a hurried meeting of the Cabinet, and those members available gathered before the radio instrument in the war office. The connection was tuned in.

"I am the spokesman of the Asiatic powers," a voice said without trace of foreign

accent. "You have seen what we are able to do. The Pacific coast is completely at our mercy. The Panama Canal is in our hands, and at this moment our ships are going through. Lightning cannot strike more quickly, or more furiously than our bombs. We are ready, however, to offer peace."

The voice stopped. The statesmen, facing a crisis far beyond their wildest dreams, looked uncomfortable. The voice came again.

"Do you wish to hear our terms?"

"What are they?" Secretary Bates managed to ask.

"As simple as is our ability to extort them," came the rapid answer; "we demand the same right in your beautiful country as you extend to Europeans. We further demand indemnity of ten million dollars a year for twenty years to defray our war costs, and to pay for past indignities suffered by our people through your ridiculous discriminations."

At the first clause of the terms, the dignitaries gathered around the radio receiver had shown evidence of relief. Money had not been mentioned. But as the last clause became clear, their faces hardened.

It was on Bates' lips to shout: "You can go to Hell!" but he restrained himself. Visions of the unburied dead in San Francisco came hazily to his mind. Yet he wondered how long the country could stand against such a foe, if it could at all.

"Ask for two days' grace," one of the members whispered.

"We will grant it," immediately came the ambassador's voice. "But at 2 o'clock, exactly forty-eight hours hence, we will call again. Your answer will either release further furies against your helplessness, or you will be granted peace. Good-bye."

With a scarcely audible click, the instrument went dead.

News of the parley buzzed over the country's telegraph system. At first it caused nothing but consternation. Then a determined

desire not to be bullied swept over the nation.

AT Washington those minds free from political and financial pollution galvanized into action. A plan of defense began to take shape amazingly soon.

President Burton gave the final decision to the press a few hours before the sea flung radio query reached the Capitol. In an address before the senate he said:

"We shall not be intimidated. A nation of successful fighters, which bought its very right to be a nation with its blood, will stand. Our answer to the Asiatics will be: 'We fight!'"

There was no answer to this ultimatum as it sped over the desolated Pacific coast homes to the waiting yellow ears.

It would, then, be war.

When, the following day, enemy ships appeared off Sandy Hook, ready to send their death dealing planes over New York City, there was no such scene as had occurred three days before inside the Golden Gate.

Guns were silent as the helicopters rose from their moorings on the great vessels. Over toward the city they came, flying low and confidently. Just past the bottle neck of the world-famous harbor came the first answer to the enemy overture.

A heavy antiaircraft gun spoke sharply from Governor's island.

A puff of smoke showed over the oncoming squadron. They kept on.

Six guns roared at the same time, and six shells burst nearer the planes. The range was not yet reached, and the flyers were not proof against gas as well as shrapnel.

A second salvo and one of the planes wavered in the air. A second later it was obviously out of control, then like a wounded plover, it came crashing to the water.

The Asiatic planes, fortified against flying metal, could not defend themselves against a highly concentrated belch of carbon

monoxide gas which immediately quenched their motors and filled the lungs of the operators with its deadly fumes.

One of the planes escaped the barrage and climbed out of range. Over the city it dropped three bombs. One fell in Times Square, killing 200 persons. The other two took a lesser toll in surrounding neighborhoods.

Meanwhile gas shells were hurled out over the water toward the enemy ships. One took effect and the ship, its officers either killed or prostrated, were unable to prevent its ramming another ship which went to the bottom. The others withdrew.

If the San Francisco disaster had been repeated in the eastern city the country might have been obliged, through force of public opinion, to accede to the enemy's demands. But this was at least a moral victory, and the country cheered itself into settling down for a prolonged fight.

The yellow holocaust came back with more planes and more ships. It seemed that from their limitless wastes of coolie lands they had evolved more ships than might be found in the rest of the world. The ships carried planes, and the planes bore deadly gas. They could only be repelled by gas.

The United States was obliged to simply put itself on the defensive. Soldiers were not required, but hosts of civilians had to be impressed into munition factories. A curtain of searchlights had to be installed on both coast lines to prevent night attacks. There was a frenzied call for more aeroplanes ... more battleships ... more capital.

At the end of six months the enemy was pressing further and further inland. By the end of October a crisis impended. In St. Louis, whither the national Capitol had been removed for safety, every face was sad with lost hope and weariness. Then, with even more startling effect than when Jeanne d'Arc appeared at the head of her mailed troops in

France centuries before, Josef Kelinev appeared, to rescue the nation from ignominy.

ON the day war was declared in June, 1945, Josef Kelinev read the account at his 6 o'clock breakfast. He had just taken a bite of his orange when he looked at the headlines of his paper.

His jaws ceased chewing, and his hands trembled as he spread the page before him. He drank in the details of the stupendous announcement and forgot the rest of his meal. He ran up stairs to his father's room.

Feodore was still in bed when Josef burst into his room and thrust the newspaper under his sleepy eyes. "For God's sake, read that." Was all Josef said.

When the import of the news had penetrated Feodore's early morning perception, he too became visibly excited.

"Josef, my boy, we've got to hurry," he said as he piled out of bed and sought clothing. "We'll have to work fast. Either we succeed very quickly or there'll be little use of success. Go on up to the laboratory. I'll be up in a second."

Josef climbed rapidly to the attic of the house.

Here he and his father, music and vases forgotten, had toiled weeks and weeks on an idea, trying to convert it into something tangible, workable. It had taken a great deal of persuasion on Josef's part to convince his father that perfection of this idea was more important than learning the exact technique of the violin. But finally the old man had caught the son's enthusiasm and had lent assistance to Josef's dream.

Feodore, as a child in Poland, had learned the machinist's trade. He had become skillful, with music as his hobby, when the two vocations had reversed themselves in order of importance in his mind. He always liked to work with his hands, however, and had often thought that, next to music, he best

loved the sight and touch and smell of metal being moulded and fashioned into machines.

So he had become the artisan of his son's ingenuity.

The discovery Josef had made in the music room months before was not a new one, but it had suggested new possibilities. When Feodore's discordant note on the violin had cracked the Venetian vase, Josef realized that here was a power which, properly applied, would become a leviathan. It was the power of vibration.

With this in mind, Josef had at first experimented with the violin. Hours at a time he had tried to coax out odd notes which would react on objects in the room. Finally he succeeded in finding a note which cracked the other of his mother's vases, and then he felt he had the secret within his grasp.

Feodore equipped a small machine shop in the attic and father and son worked together, the old man not always comprehending what he did nor why, except that Josef was enthusiastic, until, the day before war was declared, the first Vibranon was completed.

This morning, spurred by the news of war, they would test the device. If it worked....

The model Josef had constructed consisted essentially of a thin piece of brass tubing, about two feet long, with one end closed. Over the open end was arranged a bridge and peg mechanism which would hold at any degree of tautness a thin wire string similar to that of a mandolin. The string when set in motion by a bow, would set up vibrations of the column of air in the tube sending out any given number of vibrations a second into the air.

Josef had reasoned that every material known has a so-called period of vibration. If that were ascertained, and he could induce a similar vibration in the air, molecular motion in the other object would ensue.

The war news was scarcely four hours

old when Josef and his father proved their theory correct.

The day before, Josef had procured a plate of glass about three feet square. While waiting for his father to come up to the workroom he carefully checked all the measurements of the glass, and by a rapid calculation determined its period of vibration.

Feodore entered the room and Josef immediately picked up the Vibranon. He inspected the tiny, hair like string drawn over the end of the tube and strummed it with his finger. An extremely shrill, eerie note tinkled on the air.

The tone was not exactly right, so he turned the adjustment a trifle and picked the string again.

Then he took up an old violin bow, from which all the hairs but three had been removed and rubbed it gently on a cake of resin.

He was now ready for the test.

Holding the instrument in his right hand, he softly drew the bow over the string with his left.

A faint, silvery musical note reached the ear. It was scarcely audible, and was so keen it seemed rather to be felt than heard.

No effect on the glass, standing against the workbench was discernible.

Again Josef bowed the string.

This time Feodore, eyes glued to the glass, started forward.

"It vibrated, Josef," he breathed. "Keep it up."

At the fourth stroke of Josef's bow the plate glass shattered in a dozen pieces.

That moment the two men knew their efforts had not been in vain. They could not have possibly comprehended the far reaching influence their device would have, but both felt instinctively they had probed an unexplored secret.

The next day an order was issued for the evacuation of New York by all civilians

not occupied with government work. The city, according to the press, would not be in danger of attack for two days but by the end of that time any person left would be in immediate danger.

Josef and his father packed their laboratory equipment and a few personal effects and were among the first to obtain rail passage out of the city. They went to a farmhouse ten miles out of St. Louis and settled there to the work of perfecting the Vibranon to a point where it might be effectively demonstrated to the government.

THREE months to a day after the Yellow Menace had first sunk its talons into United States territory, Josef went with his invention to the National Capitol. He went because he felt he had the country's salvation in his hands if he could get help to perfect the device he was so sure could be made into an effective weapon.

Clothes shabby and unkempt, eyes sunk in their sockets from hard work and loss of sleep, Josef entered the temporary offices of the Secretary of War. He passed through an outer office to a smaller one. He wanted to go direct to Secretary Bates. He thought the Vibranon would be welcomed with open arms.

In the office, sitting behind a desk, was a middle aged man, short, bald and with whiskers. From pictures he had merely glanced at, Josef thought he must be facing the Secretary of War. He started presenting his message without further ado.

"I have come, Sir," he said respectfully, "to show you a way to bring this war to a close. With your help I can perfect this instrument to the point where it will be the most powerful agent of warfare ever known." He laid his long thin black case on the desk.

The man he had addressed looked up sharply from some papers. At first he looked annoyed, then an indulgent smile spread unpleasantly over his features.

"Mister," he said finally, "You're only one of hundreds. They all know how to stop the war—or think they do. We're far too busy around here to listen to any more twaddle."

"Are you Secretary of War Bates?" Josef demanded.

"Are you Thomas Edison reincarnated?" the man snapped. "Come now. Go along with you before I have to call the guard."

A sudden shock of anger swept Josef's whole body. The man was laughing at him, had called him an impostor. The guard would come and throw him out of the office. Very well then, he would go. He would take his idea to the enemy where it would be appreciated. Unreasoning anger blinded him, but only for a moment.

He was thinking he would leave and try again later when suddenly a buzzer sounded.

"Come on—hurry and get out. The Secretary is calling." Josef's nemesis suddenly revealed his servility, and Josef determined to wait and see the secretary.

"I came to see Mr. Bates," Josef said. He sat down opposite the desk.

"By God, you won't stay. I'll call..." The buzzer rang again.

The doorman ducked nervously into the inner office.

With the discovery he had only been talking to an outer office man, Josef planned to recourse to strenuous means to get through the door barring him from success. He quickly snapped open the case containing his Vibranon. A second he surveyed the section of plate glass dividing the two offices. Then he made an adjustment and took up his bow.

At the first piercing stroke the window shattered in its frame and the fragments clattered to the floor.

Secretary Bates himself came to see what was the matter. His officeman followed, anger written over his every feature. Josef was

still holding the Vibranon in his hands when they stepped out.

“Say, you, are you crazy, or what? Haven’t we trouble enough around here without your....”

The irate watchdog stopped suddenly as the Secretary of War placed a hand on his shoulder.

“Just a minute, John.” The voice was full of tolerance. “This fellow seems to have something to say, and I think I’ll listen.”

Josef followed the tall figure of the cabinet member into the inner sanctum.

He remained closeted with the official three hours, while the office was besieged with dispatch officers, generals, and statesmen who fumed in the outer office while Josef unfolded his plan.

When he came out he was smiling.

Josef was obliged to give one more demonstration before the War Office was finally convinced. It took place before Secretary Bates and a grizzled old West Point general, something of an inventor himself. Plates of glass were broken at will, and the Vibranon theory explained. When the test was over, the general involuntarily took Josef’s hand.

“Young man,” he said, “the country is at your feet.” And Josef knew his goal was almost reached.

Everything Josef could possibly need to perfect his device with the greatest possible speed was placed at his disposal: money, machines, men. He and his father took charge, and a few men whose interest in science qualified them, were detailed to be Josef’s personal assistants.

The first object was to build a Vibranon large enough to test its fitness as a weapon. In less than three weeks the model was completed and ready for trial.

The Vibranon was taken to a deserted artillery range which had been placed under guard. Aside from a few men to shift the

targets, the only persons present with Josef were his father, Secretary Bates and the old general.

As they reached the field, Josef noticed an old suspension footbridge over a stream half a mile from their station. He pointed it out.

“If I can destroy that bridge, we will all know that the Vibranon is a success.”

With the first few notes of the weapon there was no apparent effect on the bridge. Then the supporting cables began to sway gently as if caught by a breeze. Coaxing the swinging motion with vibrations of increased length, Josef finally produced such a movement in the cables that they broke away from their foundations and the bridge collapsed.

THE nation had been terrorized by its invaders about six months when six Vibranons were pronounced ready for action. Their manufacture had been clothed with the utmost secrecy. Aside from a very select few, no one knew what they were or what they were for.

The first use of them, it was decided, would be on the Atlantic. The instrument would be carried on one of the new electric motored airplanes which could move almost as noiselessly as a bird through the air, land either on sea or earth, complete their mission, and be off again. The planes had been made possible by the invention of a new type of storage battery combining the virtues of lightness and compactness with a charging capacity which enabled it to cover hundreds of miles without recharging.

One of these planes, a Vibranon mounted on the upper wing, would fly out among the enemy ships, drop to the water and attack.

Josef himself insisted on going to operate it. He scouted the suggested dangers and his importance at the helm of the

enterprise, but he was obdurate. He would, himself, taste the fruits of first blood, or the aloe of failure.

One night about 11 o'clock the plane left its hangar. Two hours later it was at seaboard where it landed to make arrangements for the searchlight curtain to be lifted while they passed, and again for their return. Then the expedition moved on.

The fleet was not hard to find. The plane settled almost noiselessly about a mile distant, and rode lazily on its pontoons, easily within striking distance.

The tube of the Vibranon hung suspended from a scaffold over the aeroplane wing. Taking his bow, Josef climbed to a place from which he could reach the adjusting mechanism and the string.

For a moment he toyed with the instrument, then began operating it.

The first intimation he had that damage was done to the enemy was when one of the nearer vessels suddenly seemed to spring to life. Flood lights appeared at bow and stern, and men could be seen running along the decks.

Josef continued fiddling without changing the tone of the Vibranon.

Confusion became evident among the bustling figures on the boat. They seemed to be all trying to reach safety in one of the helicopter planes when instantly, as though a huge rock had been dropped from the sky to its deck, the vessel flattened out on the water. Lights went out and across the distance came a faint sound of drowning cries.

The ship, vibrated from keel to mast, and simply fell to pieces.

Josef tightened a screw and sent a new note out across the wreckage. He bowed with a silent intensity, face grim, but with an exultant gleam in his eyes.

Another ship crumpled with a roar of burst boilers which sounded like the growl of an angry lion hidden in a deep cave.

Aboard the other vessels terror such as can only come to men faced with some mysterious unseen foe brought about pandemonium. Officers vainly strove to pacify the men. Always the question: "What is it?" answered their threats and their orders. An evil thing from the sky, accompanied only by a wavering, high pitched musical note was tearing the very decks from beneath their feet.

A third ship, wracked and torn by the quivering of its steel, collapsed and sunk.

Then the officer in command gave orders for the fleet to get away from the place as fast as churning propellers would take it.

Josef climbed back down from his perch to the cockpit of the plane and ordered his pilot to fly back to the base.

Before daybreak, five other planes equipped with Vibranons left St. Louis, for enemy concentrations.

DESPITE efforts on the part of the war department to keep Josef's accomplishment a secret, bits of the news leaked out. It was not generally known what had routed the Asiatic fleet from off Sandy Hook, but that something had been done became general knowledge. It served to change an attitude of dogged resignation to one of hope throughout the country.

The raid by the other five Vibranons was fairly successful. A warning had been sent out to all the Asiatic fleets on both seaboards to be on the lookout for a strange terror which would come unexpectedly, but which could only be escaped by flight. At least one ship in each group, however, was sunk, and one of the Vibranon operators ordered his plane in pursuit of the vessels which had fled and was able to destroy another before being obliged to return to land.

Josef might have been satisfied that production of a quantity of Vibranons would end the war in time. But he wanted more. He wanted it all to end quickly.... he felt that he

could perfect his weapon so that it would kill as well as destroy.

While others proceeded to equip more and more planes with Vibranons and teach men to use them, Josef busied himself with further experiments.

Often while working on models, he had felt the physical effect of some note twanging from one of the instruments. He knew that bones could vibrate, and felt furthermore that the proper note would cause muscular contraction. If the instrument could be made to vibrate at the proper pitch, spines could be broken, heads caved in and hearts stopped by a simple musical note.

In order that the Vibranon could be made a killing weapon, its range must be increased and a pitch developed which would only affect muscle and bone substances. Furthermore some arrangement would have to be made to prevent the killing of friend as well as enemy.

Captain Rothstein, who had made a number of valuable suggestions to Josef during their association with the Vibranon, undertook to take care of lengthening the range and he also answered the last problem as soon as it was suggested by Josef. "Why that's simple enough," he said. "The enemy as a whole is composed of men much smaller than our average ... about your size, Josef. If you could learn how to kill them with a note, the same vibration wouldn't affect our own men. All we would have to do then would be to have all small men ordered out of range and then shoot away."

Josef went on from this starting point. His next problem was to find specimens on which to experiment. War prisoners were suggested, but permission to sacrifice them could not be obtained. As a last resort, cadavers were supplied and it was this fact which probably cost Josef his life.

One day Josef drew a bow over the tiniest Vibranon he had ever constructed. A

corpse hanging suspended in a sort of framework ten feet away seemed to shudder as the note went out. But no bones were broken and Josef could not tell what other effect it had had on the body.

It was late afternoon. He was tired out with his labors, and was discouraged. So he decided to go home and rest.

He tried to relax while he ate dinner, but the nervous tension due to his extreme ambition for success kept him keyed up and nervous.

He went to bed and tossed for hours, wide awake. Finally he dressed and went back to the workshop.

The building was deserted except for the guards around it. A husky soldier at the front entrance, recognizing Josef, told him there was not a soul in the building.

Josef went into his inner workroom and switched on the lights. The corpse he had used a few hours before still swung from its frame, but under the ghastly stare of powerful lamps, its face seemed to have acquired a sickly grimace.

The inventor hesitated for a second looking at the yellow face as if its death grin had warned him to go back to his bed. Then he went grimly over and picked up the newest Vibranon. Almost mechanically he tightened the string a little and reached for the bow.

At the first quiver of the string Josef felt a wracking pain shoot through his body. He grew immediately as rigid as if suddenly cast in metal. He could still think and feel and see, but he could not move. It was as though his muscles had been changed into steel springs drawing his bones the wrong way. The agony was insupportable. Without being able to let go he still clutched the Vibranon in his left hand.

He began to feel nauseated, then a numbness crept over his senses. He teetered back and forth like a wooden soldier tipped on its base.

He knew his end had come. What he had hoped to do to others he had done to himself. If only he could tell that it was the Vibranon which had killed him. If they could only know that the instrument he held was tuned exactly to the killing pitch. If only he could make sure they would know how to use it.

Darkness swam before his eyes. His breath was almost stopped. The springs were holding his lungs pressed so tightly together they could draw in no air. He felt himself falling. With a supreme effort of will power, he forced his body to the right as he fell, so that the Vibranon hung safely in the air when they found him the next morning. The handle was partly crushed with the intensity of his grip.

Captain Rothstein knew the second he entered the room what had happened. And before any but Josef's father, who also understood, could come, he had carefully pried open the cold stiff fingers and drawn out the precious weapon.

Within two weeks the war was over.

The Asiatics were scientists themselves but they were beaten at their own game when their air pilots, flying out of range of the gas shells, and their sailors seeing ships sink from under them found themselves victims of a new kind of death. They could find no defense. They were killed as fast as they came until they offered terms of surrender.

ON the day peace was declared, Feodore Kelinev crept out to Josef's grave carrying a violin case. It was bitter cold and Feodore wore no overcoat. Beside the mound of fresh earth which covered all his hopes, the old man drew out Josef's old violin.

Teeth chattering, and fingers blue with cold, he raised it to his chin and played. It was the old finale which Josef had not been able to master. Oblivious to the cold, Feodore played the notes leading up to that fateful harmonic. He reached the note. Part of the bow length scraped without sound, then the note came clear, perfect, full of volume. With a cry of anguished triumph, the old man threw wide his arms and collapsed over the grave.